Cooperative Extension Work

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LINCOLN DAVID KELSEY AND CANNON CHILES HEARNE

A farm family is a unit of business and living. Extension plans should take this into account. 4-H Club members need parental cooperation; the father needs the family's help in farm plans; the mother influences attitudes.

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Preface

THIS BOOK has been prepared for use by upperclassmen and graduate students in cooperative extension education. It is the result of an effort to bring together the best information available on the work of the Cooperative Extension Service. In no sense do we imply originality in material, for we have taken much of it from references, with proper acknowledgment. Necessarily, however, the selection of material and the points of view reflect our ideas. These ideas have grown into our thinking through years of experience and after consultation with many extension workers and students of many states and with agriculturists and farmers in other lands.

It is hoped that the book will be an aid to pre-service, induction, and in-service training. Possibly leaders in related agencies and organizations will find it helpful.

Requests are continually coming in for one book covering the whole story of extension work. Often these demands are from foreign visitors. An experienced worker who picks up this volume may feel that it is too detailed. Our defense is that it must be complete and logical. Furthermore, whole books have been written by others on the subjects of most of our chapters. In meeting the dilemma of what to include and what to leave out, what to stress and what to touch lightly, we have been guided by what we believe to be the needs of the service. For example, we know that much more detail is given about photography than about meetings. But meetings are old tools. Photography is much needed, and new aspects are arising currently. Even in the section "Now Let's Get Technical!" in the chapter on photography we have only scratched the surface; but we have brought together information which every extension worker should have at hand. Chapter

XXIII on publications is very slim, but it would be a mistake to omit it. Specialists who are writing bulletins may want the new bulletin prepared by Miss Leonard. We have tried to bring some perspective to beginners, to show the basis for choosing policy, procedures, or methods. For the person interested in intensive or graduate study the footnote references suggest further sources.

As this book goes to press there is being published the Joint Committee Report on Extension Programs, Policies, and Goals. The report contains important recommendations regarding relationships with general farm organizations, Smith-Hughes Education groups, and the like. The authors are not aware of having made any statements that conflict with the report. We are grateful that it is available for training workers and for the guidance of administrators.

For special encouragement and assistance we acknowledge with thanks the help of M. C. Burritt, Mrs. Amy Cowing, Herrell DeGraff, E. F. Graff, Clifford R. Harrington, Lavern Henderson, Mrs. Helen Hoefer, Mrs. Alice Geer Kelsey, Paul J. Kruse, Nell B. Leonard, Roy McCallum, A. H. Maunder, Harry Mileham, Fred B. Morris, Mrs. Mary G. Phillips, Josephine B. Pollock, Robert A. Polson, Charles E. Potter, Mrs. Laurel Sabrosky, Lester A. Schlup, L. R. Simons, and W. B. Ward.

We are indebted to J. Paul Leagans for much of the material in Chapter X. Chapters XXIV and XXV were prepared by Don Bennett from material used in his course at the Cornell Summer School for extension workers.

Illustrations have been furnished by the Extension Service and the Soil Conservation Service of the United States Department of Agriculture, by the state Extension Services of New York, Missouri, Maine, and Iowa, and by the Eastman Kodak Company. Two illustrations are from Don Bennett. We gratefully acknowledge this generous help. We are indebted also to Elmer Phillips and Richard Maurer for photographs and for the use of their visual-aids files.

LINCOLN D. KELSEY
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January 1, 1949

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PART I

What Cooperative Extension Work Is

Extension work is an out-of-school system of education in which adults and young people learn by doing.

It is a partnership between the government, the land-grant colleges, and the people, which provides service and education designed to meet the needs of the people.

Its fundamental objective is the development of the people.

CHAPTER I

Progress in Agriculture and Homemaking

EXTENSION WORK grew out of a situation. It has come to be a system of service and education designed to meet the needs of people. What was the situation which gave rise to this unique American development? It was a period of pioneering and change in agriculture and homemaking.

The United States is a young country viewed in terms of world agriculture. But already millions of acres which once were covered with waving fields of grain are now growing buffalo grass in the West or forests in the East. Apart from the losses to individuals and certain social adjustments which these abandoned farms have caused, they stand as evidence of progress. Better lands and changed methods of production have made it possible to produce more efficiently elsewhere. Who knows whether some day changes in economic conditions, methods of production, or types of farming, or a combination of such changes, will bring part of these lands back into production?

In a lesser degree there are other cycles of change. Certain areas which produced hay and grain for cash during the "horse-and-buggy days" are changed or changing to livestock farming. This, too, has involved some individual financial losses and some social changes on a smaller scale. Gradually the permanent farming areas are being defined, but within these areas there is constant change. These changes bring about the system of farming and combination of enterprises best suited to the area and available markets.

To understand these changes both great and small and see them clearly in history is a great help in recognizing similar changes in the

hour in which we live. The outstanding difference between the agriculture of the Old World and the New World has been emphasis on yield per acre of land in Europe and Asia and production per man in America. Where land is scarce it is the limiting factor in total production. Where labor is scarce or well paid it becomes the dominating consideration. Since labor is such an important factor, let us look briefly into the last century to see what we can find that will help us understand its effect on the progress of agriculture and the American way of life. To do this we quote from an address by Herrell DeGraff, Cornell University, presented at the 114th annual meeting of the New York State Agricultural Society at Albany, New York, January 23, 1946:

In 1800, about three-quarters of the U.S. population was on the land. Farming methods were in the stage of the ox-team, the sickle, and the

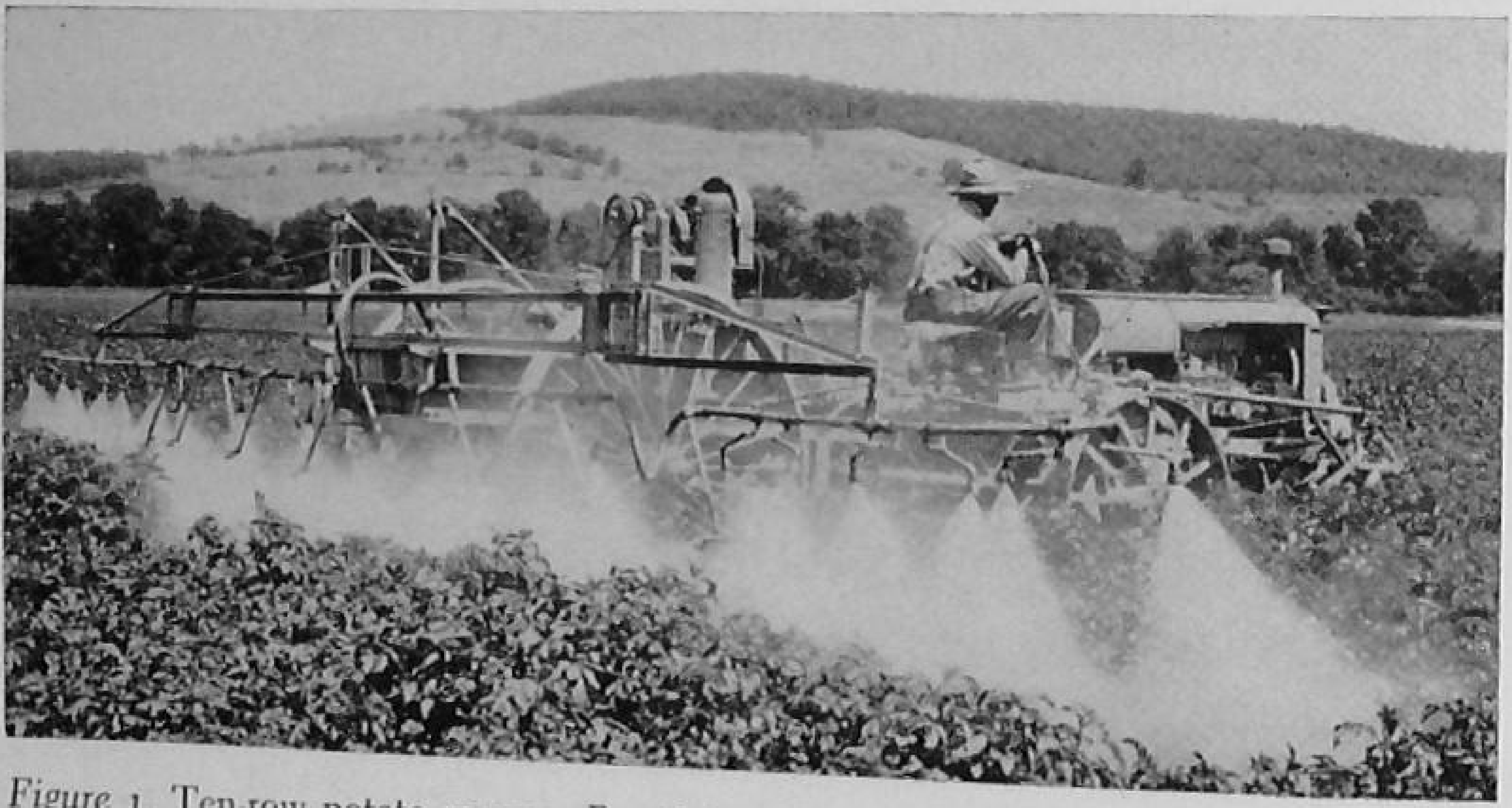

Figure 1. Ten-row potato sprayer. Rapid improvement of farm equipment has characterized the progress of agriculture in the United States.

flail. Edwin Markham's classic poem, "The Man with the Hoe," fitted the farm life of that day as fully as it had at all previous times in history.

But the face of rural America has changed; slowly at first, because agricultural methods changed slowly before the middle of the century. Reapers, mowers, and other horse-implements did not come into general use until 1850 and after. This Society still gave fair premiums for grain cradles and grass scythes until after the Civil War.

The proportion of the U.S. labor force that was engaged in agriculture declined about 2 per cent per decade up to 1850; and at that date two-

thirds of the gainfully employed workers of the country were still on farms. Since 1850, the decline in the percentage of all workers that were on farms has run at nearly a constant figure of six per cent per decade. In 1875, only half of the U.S. labor force were farm workers, and by 1920 the figure was down to one-quarter.

This does not mean a decrease in the number of farmers. It means that the population growth of the country was flocking largely to the cities. And it means further, and more significantly, that each worker on the land was providing farm products for an increasing number of non-farmers. By 1930, each farm worker was feeding himself and his dependents, and four non-farm workers and their dependents. By 1940, these relative proportions had grown still a little wider. What we are saying, then, is that agricultural progress in the U.S. has released four out of five workers to produce things other than farm products. Since no nation can rise to a very high standard of living on the basis of agricultural production alone, it has been the increasing efficiency of the farmer, releasing a major proportion of the workmen of the country to produce other goods and services, that is the basis for our vaunted American standard of living. If you will permit me to hold that position, then I can go on to say that the American standard of living rests squarely upon the progress that has been made in agricultural production.

And now, if we look upon the farm labor force as being the foundation of the social structure of the country, a change has taken place from a broad pyramid in 1800 to an upside-down-pyramid resting upon its peak in 1940. The advantage of an upside-down-pyramid is that it raises its mass higher into the air—to a higher standard of living, if you will let me draw this analogy to our society. But one trouble with an upside-down-pyramid is obvious; it may get the wobbles, for it is surely less stable than when it stands other end up.

And let me add further to this story. In the war years between 1940 and 1945, the farm population of the country actually declined 8 per cent—a decrease of five million persons. The proportion of the productive workers of the country who were working on farms was down to about 17 per cent last year.

And still this is not all. There is an approximate six million so-called farms in the United States; but a recent study has shown that about two and a half million of these actually produce practically the whole of the commercial farm production of the country. The other three and a half million are subsistence farms, residential farms, and would-be

farms that the march of farm progress has gone on and left behind.

Thus, it is not so much six million farms employing nine million workers that is the food base of the country, as it is two and a half million farms employing five million workers. If we may accept these figures, then it is only an approximate 10 per cent of the labor force of the country that is producing the commercial farm products. And when we see that the nation is self-sufficient, if not indeed a little more than self-sufficient in farm products, then each full-time worker on these two and a half million farms is feeding himself and twenty-five other persons in addition. And this, let me emphasize, is a level of efficiency in general farm production that is new in man's history.

It is interesting to note in the pages of agricultural history that a very significant part of the science of agriculture has been originated in the laboratories of Europe. It is also interesting to see how quickly those results, along with the findings of our own scientists, have been put to the test of practice here in America. The proceedings of this Society are replete with the results of European investigations. What are the conditions, we may well ask, which have made the American farmer so avid for that which is new and better?

Primarily, the answer seems to lie in the environment in which he has lived and worked—an environment which has had two major aspects. One of these was a vast new country with what, for a long time, were seemingly unlimited resources to be developed and brought into use. The total of resources per capita in America has been so great that they have been used recklessly, as is to be expected in a pioneer economy. New land was available for the taking, or at least for the asking, until about the close of the last century. A result of this situation is that land has always been cheap in America relative to the cost of labor—and the farmer has had strong dollar-and-cents encouragement to use every means possible to increase the productivity of his labor. To this end he has replaced handwork with equipment, and has eagerly sought such additional machinery as would give him further net cost savings compared to the expense of the alternative labor. He has for the same reason improved his crops and his livestock as fast as knowledge and comparative costs permitted, so that the hours of labor spent upon each acre and each animal would be more productive.

The supply of new land has now soaked into the blotter of a growing population. Land values are showing a tendency to rise. But the relative costs of land and labor have not changed because the American economy

continues to grow; the average productivity of the American labor force continues to rise; the American standard of living rises proportionately; and the farmer pays rates of wages strongly influenced by average productivity in all lines of employment. Thus for the sake of his own standard of living he remains as much under pressure as ever to steadily increase the productivity of the labor force on his farm.

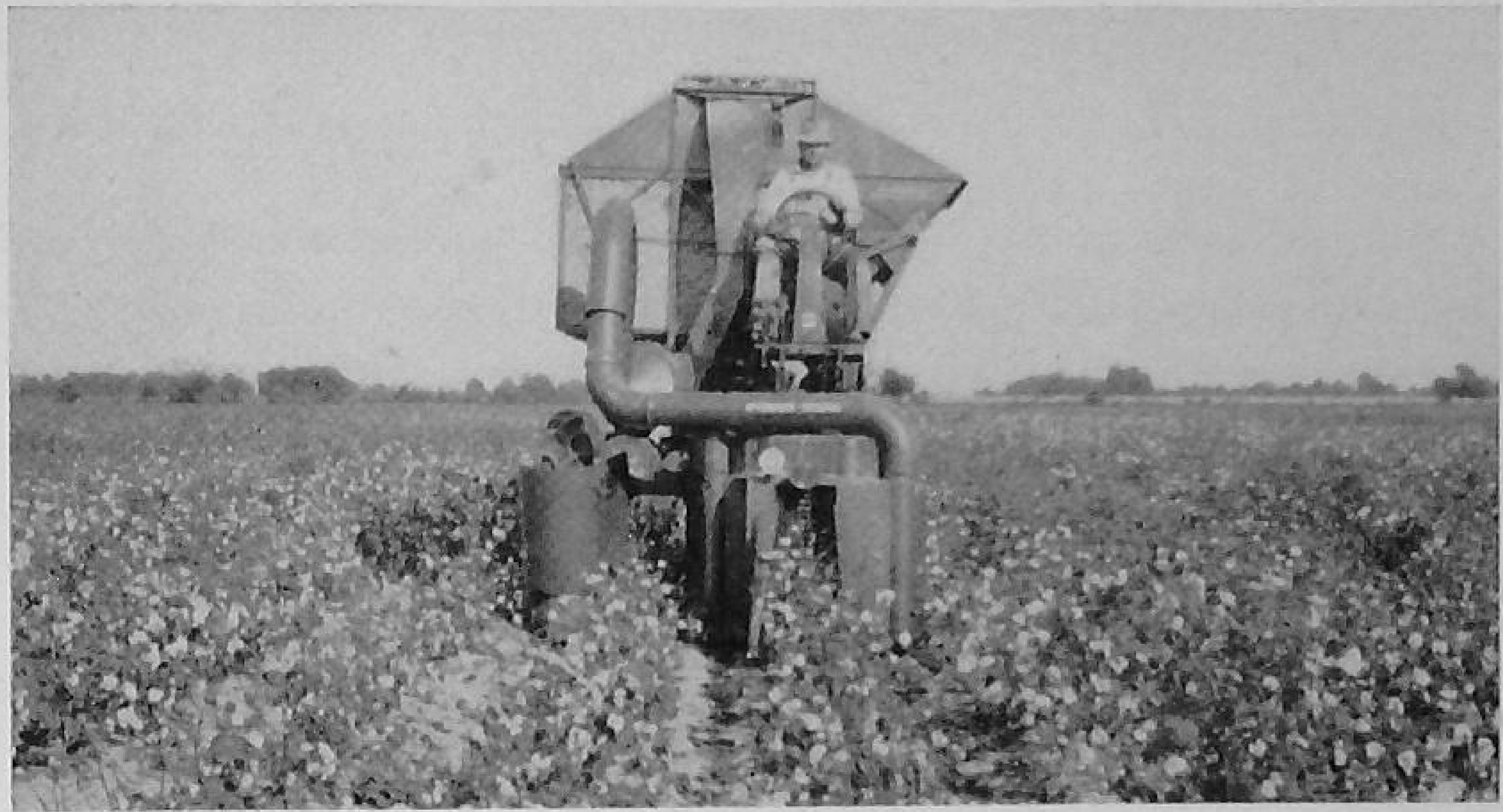

Figure 2. The mechanical cotton picker is here to stay. Technological developments have been releasing farm workers for other work for many years. The necessary adjustments require a sound extension program.

The other environmental influence that has promoted agricultural progress in America can be stated simply as political and economic freedom. People came from the Old World to America that they might be free—not, however, that their definitions of freedom were in all cases the same. Variously, the lure and the magnet that drew immigrants to Plymouth Rock and to Ellis Island alike was freedom from too many people and too few resources, freedom from the whims of despotic princes of state or of church, freedom from imprisonment for their debts, or freedom merely from the hang-overs of rigid feudalism that relegated them to the status of second-class citizens in their homelands.

In America there were all these freedoms. There was hope—and there was such nourishment for hope as anyone was disposed to seek. Little wonder that in the Declaration of Independence by which the husky young nation severed the umbilical cord from the Mother Country, it should be set forth that all men have certain inalienable rights, that gov-

ernments are established to secure these rights, and that all just powers of government are derived by grant from the governed.

But we must recognize that it was in the vastness of the country, in the richness of its resources, and in the westward expansion of its population, that the personal freedoms and the private enterprise so established found a fostering climate. It was a unique and fortunate combination of circumstances that released the latent ingenuity of men. The productivity of the farmer increased. The productivity of other workers whom he had released from farming increased. The American standard of living set successions of new high levels. . . .

And so from the days of our forefathers, who began as pioneers and woodsmen, there developed a country which was primarily agricultural but which has since gradually become a great industrial nation whose capacity for agricultural production has kept pace with our needs.

For the homemakers the days of spinning wheels, candle molds and bulging pantries have given way to the textile mills, electric lights and commercial food processing.

With these changes the homemaker has come to have a new role, the importance of which she herself does not always realize. Her part has always been essential, especially in the farm home. Now she has the responsibility for spending a large part of the family income for food, clothing, and furnishings. The management of the home is quite as important as the management of the farm, for each is dependent upon the other.

While home economics as taught by the Extension Service was directed originally to the rural population, there is now a growing understanding of the enormous opportunities and need for work among the homemakers of the cities and suburbs, where the quality and quantity of the diet of consumers directly affect the lives of multitudes of citizens as well as the markets for farm produce. With the granting of the franchise to women, their entry into business and industrial employment, and their proved capacity for participation in the social and welfare organizations of the community there is little doubt about the need for training and service which will help them take their full place as citizens. These are days when many

forces are at work challenging the strength and validity of home bonds. Progress in homemaking is not served by a nostalgic rehearsal of the "good old days" when home life was not interrupted by the movies, the roller-skating rink, and a dozen other diversions. The progressive homemaker, like the modern farmer, will face the chang-

Figure 3. In wartime, consumers were willing to perform some of their own services. In normal times, full employment and high consumer incomes may tend to increase the demand for marketing services.

ing times determined to utilize every service of science and education to bring about a fuller and better life, on the farm and in rural and city homes, and to discharge her responsibilities of community and world-wide citizenship.

There will always be a wide variation in the cost of producing farm products because there is such a wide difference in the quality of farm land and in the training and ability of the thousands of individual farm operators. For this reason there will always be a considerable number of farmers in an unfavorable position. The actual numbers who may be operating at a loss depends on the relation of the prices they are receiving to the prices they must pay for the things

they need. Hence there will always be "the farm problem." The purchasing power of farmers as a consumer group has great weight in the economic balance of the country. Our country areas have provided an almost continuous supply of population flowing into our cities.

Whether we take the farm as a small business, as a center of home life and culture, as a reservoir of purchasing power, or as a source of future citizens, the march of progress toward an efficient and prosperous farm and home life is a vital movement of concern to everyone. With government experiment stations in every state and special ones at the national level, and with the research now being done in the laboratories of the manufacturers of farm and home supplies and equipment, we are certain of a continuous flow of new methods, new chemicals, new devices, and improved facilities. In the period between the invention of the cotton gin and our present mechanical cotton picker, farmers have come to recognize that science as well as skill is required on the farm. How rapidly desirable changes will come about in the practices of the average farmer and homemaker is dependent on a host of influences.

The extension worker who devotes his life to this service with adults and youth, and catches the vision of progress will have much satisfaction in the variety and importance of his work. In Chapter X we shall ask whether we are looking for progress with men or with things.

CHAPTER II

Origin and Beginning

WE SAID that extension work grew out of a situation, which was of course a historical situation. Records of the origin and beginnings of this distinctly American institution are an important part of American history. When Abraham Lincoln signed the Morrill Act in 1862, creating the basis of our system of land-grant colleges, it is probable that his deep-seated concern for the common man controlled his actions more than any superhuman vision of the great system of extension education which has come to be envied the world over.

Extension work is largely the result of the working together of two great forces. First, American agriculture—characterized by cheap land, scarce labor, new products, and the use of credit—second, American education—as characterized by Ezra Cornell's ideal of education for any man or woman in any field. Americans early recognized the responsibility of the government to provide practical education as distinguished from the classical type.

The need for scientific knowledge in agriculture in the early part of the nineteenth century was emphasized by:

1. The closing of the land frontier.
2. Distance of producing areas from markets.
3. Crop specialization.
4. Growing credit needs.
5. Changing cultural problems.
6. Need for abundant food at reasonable cost.

Early Agricultural Societies [1]

Agricultural societies were formed to acquaint their members with what was being done to improve agriculture, to encourage the formation of other local agricultural organizations, and to disseminate agricultural information. The Philadelphia Society was formed in 1785. In 1792 the records of the Massachusetts Society for Promoting Agriculture show that meetings were held to forward improvements in agriculture. At one time 1,000 circular letters were sent out. Town clerks were asked to read them at town meetings, and the aid of clergy was invoked. To these societies we owe the holding of fairs for competition, sales, and education. Addresses were given and published. Farmers' clubs were formed and speakers called from outside.

Other Agencies for Education in Agriculture

Columbia University at New York City and Rensselaer Institute at Troy, New York, provided persons trained in science as applied "to the common purposes of life." The Ohio State Board of Agriculture was created by the legislature February 28, 1846. Later Dr. N. S. Townsend and three other lecturers undertook to give a three-months course on the sciences and their application to agriculture at Oberlin, Ohio. In 1848 the State Agricultural Chemist was required to lecture in districts and towns. His lectures were to be published if it was deemed advisable.

Farmers' Institutes

In 1854 the Secretary of the Massachusetts State Board of Agriculture, Charles L. Flint, said that he believed farmers' institutes might supply the want of agricultural education. Not long after, publications in tract form were distributed on subjects such as manures, pasture renovation, grain crops, fruits, and fencing. Soon

[1] A complete and scholarly account is in *A History of Agricultural Extension Work in the United States from 1785 to 1923* by A. C. True (U.S.D.A. Miscellaneous Publication No. 15, October, 1928). This chapter from this point on is in a large measure a brief from that book. Certain quotations have been taken from M. C. Burritt's *The County Agent and the Farm Bureau* (New York: Harcourt, Brace and Co., 1922, out of print).

this Board was sponsoring discussions and lectures by leading agriculturists of the time on soils, butter making, cattle breeding, grape culture, and a variety of subjects.

At New Haven, Connecticut, the Yale Scientific School held a series of popular lectures for farmers on agricultural chemistry, pomology, and animal husbandry. Lecturers were drawn from various states. This series was followed by other sessions organized by the Connecticut State Board of Agriculture.

The Union Agricultural Society of Kansas held a farmers' institute in County Hall, Manhattan, November 14, 1868. Subjects discussed were "tree borers; culture of fruit trees and economy on the farm." Local institutes were held for many years under the auspices of the Bluemont Farmers' Club. About this time similar lectures and institutes were begun in Illinois and Missouri.

In 1872 Iowa had its first series of farmers' institutes, announced as follows:

> These institutes will open on Tuesday evening and continue to Friday evening of the same week.
>
> The sessions during the day will be occupied with lectures and discussions on stock breeding and management, fruits and fruit growing, farm architecture, farm engineering, farm accounts, raising of crops, etc.
>
> Public addresses on subjects connected with agriculture will be given in the evenings.
>
> A farmers' institute may be secured at any locality, in the order of application, by forwarding a written request to the president of the college signed by 50 farmers who desire to attend all the meetings.
>
> It is expected that the current expenses of the lecturers will be paid by those in whose interest the institute is held.[2]

New Hampshire, Vermont, New Jersey, and Tennessee began to hold public meetings that soon became farmers' institutes. Michigan began a series of farmers' institutes which lasted for 12 years, with 6 regular institutes annually. The following quotation (from U.S.D.A. Bulletin No. 174, 1906) shows how these early institutes were handled by the secretary of the college:

> The preliminary correspondence was carried on by the secretary, and after the places for the meetings had been determined each of the in-

[2] True, p. 11.

stitutes was placed in the hands of a member of the college faculty, whose duty it became to "work up" the meeting. As a rule, the places were visited, and at a preliminary meeting a local committee was appointed to take charge of the arrangements for the meeting. Topics were selected for the State speakers, and local talent enlisted to furnish one or more papers for each session, as well as music and recitations. The conductor also looked after the itinerary of the State speakers and saw that hotel accommodations were secured and that proper local arrangements were made.[3]

Nebraska, Pennsylvania, and Alabama all began similar work before 1880.

In the next decade farmers' institutes were established on a more or less permanent basis in twenty-six states. Special appropriations were made in many states. The original plan in Ohio for farmers' institutes provided that the state would send out specialists for two days and one evening to any county whose citizens would guarantee five things: (1) a hall, warmed and lighted, (2) music, (3) the help of local talent, (4) advertising, and (5) local expenses, including the hotel bills of outside speakers. Under the Wisconsin system the state superintendent of farmers' institutes arranged the programs, selected the lecturers, did the advertising, and had general charge. Among the lecturers were I. P. Roberts, W. D. Hoard, and W. A. Henry. The reports show that the speakers seldom took more than thirty minutes and generally a discussion of equal length followed. "The conductor at each meeting promptly shuts off partisan political discussions or statements based on ignorance, prejudice or superstition." Under the title of "cooking schools," sometimes separate sessions on preparation and nutritive value of foods were held for women.

In New York State the farmers' institutes were inaugurated in 1885 by I. P. Roberts of Cornell University and J. S. Woodward of Lockport, New York. In the years that followed a great demand for institutes grew up throughout the state.

In the year 1899 institutes were reported in 47 states with a total attendance of over 500,000 farmers. In 16 states the institutes were

[3] True, p. 12.

connected with the State Department of Agriculture. In 19 southern and western states they were directly under the auspices of the agricultural colleges or experiment stations. Women were encouraged to take part, and the number of women lecturers gradually increased. In 1903–1904, in New York, school children were especially invited and programs arranged for them. About the same time prizes for exhibits by young people were offered by the institutes in Indiana. About 1904 special institutes for Negroes were begun in North Carolina.

With increased state and federal funds to aid them, farmers' institutes spread widely during the fifteen years ending in 1915. Two other events aided this growth—the organization of the American Association of Farmers' Institute Workers and the establishment of a federal office to promote the work. Professor John Hamilton of Pennsylvania, long prominent in the American Association and a man of outstanding ability and experience in organizing farmers' institutes, was appointed as specialist in the Office of Experiment Stations in 1903. In the early records of the American Association of Institute Workers the name of Kenyon L. Butterfield constantly recurs. The "idea of systematic, long-continued, and thorough instruction to the farmers the year through" was commended by Mr. Butterfield as the goal of the work. The increased interest and participation of women and boys and girls also built up attendance and spread influence. At the close of this period over 8,000 institutes were held annually with more than 3,000,000 people in attendance. It was only natural that with the passage of the Smith-Lever Act in 1914 radical changes resulted in the decline of this particular method of extension teaching.

Early Extension Work

Along with their part in farmers' institutes, the agricultural colleges independently undertook various forms of extension work such as field demonstrations, cooperative experiments, extension lectures, reading courses of popular bulletins, traveling libraries, assistance to granges, boys' and girls' clubs, nature study, garden clubs, and surveys. All this work was influenced and aided by the growth of the Chautauqua system.

This movement began with the foundation in 1874 of the Chautauqua Sunday School Assembly, by Lewis Miller and John H. Vincent. This assembly met for 10 days in August, at Chautauqua Lake in New York. Its program combined instruction, recreation, and entertainment. The variety of subjects studied increased from year to year, and the session was lengthened. In 1878 the Chautauqua Literary and Scientific Circle was organized and had a council in whose membership were Lyman Abbott and Edward Everett Hale. Home readings extending over four years were organized and planned. Each year's course consisted of 4 books and 12 numbers of a special magazine. In 1883 correspondence courses were begun and continued for several years. Within a few years 60,000 persons were pursuing these courses systematically, and there were many other people following the Chautauqua readings to a considerable extent, either individually or through small local circles. Interest in the movement was kept up by the well-attended annual assemblies at Chautauqua Lake and by similar meetings organized independently in various parts of the country. . . .

An early and important development of organized extension work in agriculture in the State of New York resulted from a request by farmers in Chautauqua County, largely devoted to grape growing, for experiments suited to their needs from the experiment station at Cornell University. The station had no funds for this work, and the farmers therefore appealed to the legislature in 1894.

About this time, L. H. Bailey, then professor of horticulture at Cornell University, suggested that State aid should be sought for publishing information and holding horticultural meetings. S. F. Nixon, assemblyman from Chautauqua County, obtained the passage of an act which granted $8,000 to be spent by the experiment station in 16 counties in western New York for horticultural experiments, investigations, instruction, and information.[4]

In Ohio the board of trustees of the State University employed as superintendent of extension work A. B. Graham. He began work in July, 1905, and during the first four years much attention was given to boys' and girls' club work. Various types of extension work began in Illinois, Kansas, Iowa, New York, Michigan, and other states. The broadening of extension work of agricultural colleges and its rapid development created a desire for a more systematic

[4] True, pp. 43, 44.

organization. This desire was expressed at the meeting of the Association of American Agricultural Colleges and Experiment Stations in 1904 by Kenyon L. Butterfield, who said, "This work will not only be dignified by a standing in the college coordinate with research and the teaching of students, but it will rank as a distinct department with a faculty of men whose chief business is to teach the people who can not come to the college."

Four years later the committee on extension work of the Association of American Agricultural Colleges and Experiment Stations renewed its recommendation that the land-grant colleges make a definite organization for their agricultural extension work—"by creating a section of extension work." Between 1910 and 1914 the work grew in extent and complexity. The reports of the Association show an effort to develop strong programs coordinated with the subject-matter departments so that the teachings in the field would conform to those in the college as a whole. W. D. Hurd, who was director of extension for Massachusetts, headed a committee that made an elaborate report in 1913. It covered (1) organization, (2) training of students for extension work, and (3) cooperation with other agencies. These last two aspects of the problem were new, and little had been done about them previously.

Farmers' Cooperative Demonstrations

The originator and leader of this movement was Seaman A. Knapp (1833–1911). He was the son of a physician at Schroon, Essex County, New York, and graduated at Union College, Schenectady. Crippled by an accident he settled on a farm in Iowa and undertook the raising of general crops combined with livestock. He soon became known for his enterprise and scientific approach to agriculture. He became a professor of agriculture at Iowa State College and later president for a short term.

In 1886 Professor Knapp went to Lake Charles, Louisiana, where he had charge of the agricultural development of a large tract of land in western Louisiana. When it proved difficult to interest the native population in improved methods of agriculture, and farmers from the North refused to settle in this region because agricultural conditions seemed so

unfavorable, Professor Knapp offered very favorable terms to one settler for each township. These farmers were to come from Iowa and other Northern States and show what could be done by good farming under his general direction. This plan was so successful that, as a result of these demonstrations, thousands of northern farmers settled in this region, and the natives also undertook better farming.

Experience in this undertaking confirmed his belief that farmers generally would not change their practice from observing what could be done on farms operated at public expense. There must, therefore, be demonstrations carried on by the farmers themselves on their own farms and under ordinary farm conditions.[5]

An emergency appropriation was made by Congress and Dr. Knapp was assigned $40,000 "to bring home to the farmer on his own farm

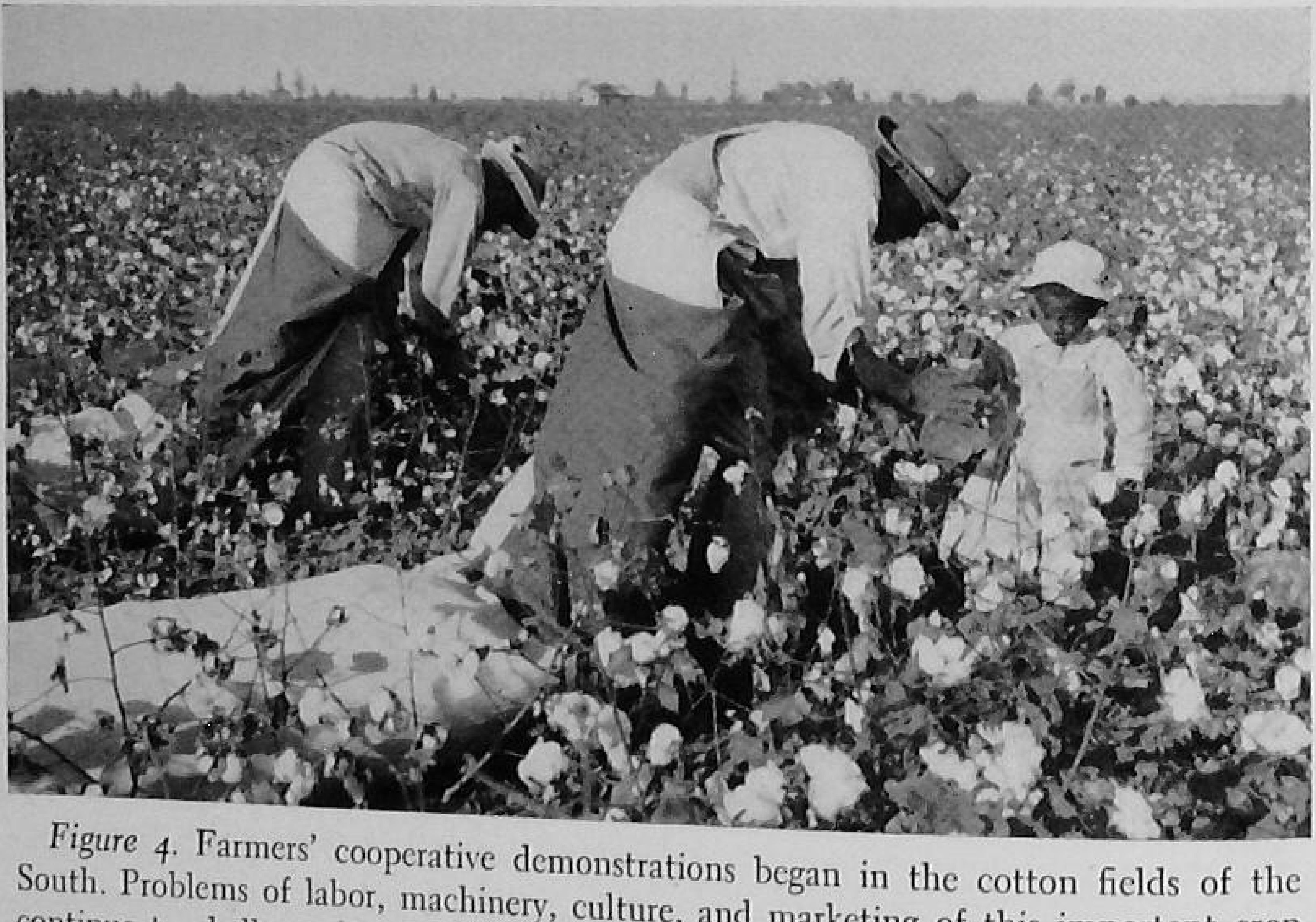

Figure 4. Farmers' cooperative demonstrations began in the cotton fields of the South. Problems of labor, machinery, culture, and marketing of this important crop continue to challenge the grower.

information which would enable him to grow cotton despite the presence of the weevil."

In 1904 over 20 agents were employed in Texas, Louisiana, and Arkansas, and 7,000 farmers agreed to demonstrate. Agents visited representative farmers, obtained their cooperation as demonstrators,

[5] True, p. 59.

and furnished them with working plans, records, and reports. Those who agreed to manage a part or the whole of their land under directions sent out by the Department were called "cooperators" to distinguish them from the "demonstrators" who followed the directions on 5 to 20 acres of their land. At first agents were expected to cover six or eight counties, but the number of demonstrations they could supervise did "not create sufficient public sentiment and moral force to change the long established usage of the masses." On November 12, 1906, the first county agent, W. C. Stallings, was appointed in Smith County, Texas. His appointment resulted from a local demand for more demonstrations and more information. Agents were appointed on the advice of local committees of businessmen and farmers. Both district and state agents were expected to carry out successfully the instructions of the central office. It was exclusively a federal enterprise. The success of these farmers' cooperative demonstrations was due largely to the unusual personality of Seaman A. Knapp.

Aside from the conditions which made the demonstration system peculiarly applicable to the then-existing situation in southern agriculture and country life, it brought to light certain fundamentals which permanently enriched agricultural extension work. The most important of these contributions were (1) the emphasis laid on the active participation of the farming people in demonstrations conducted for their benefit and (2) the establishment of the county agent system, under which farming people make use of trained official helpers permanently located near them, from whom they may receive the useful knowledge possessed by these agents and also instruction from the institutions which the agents represent.[6]

Different Problems in the North

In the majority of the states in the North and West the nature, status and comparative wealth of the agricultural population had created different problems which necessitated a somewhat different method of attack. Particularly in the Middle Western states and in parts of the Eastern and the far Western states, farming was generally more advanced and better diversified and developed. The type of farming was more perma-

[6] True, p. 73.

nent, a greater proportion of the farmers owning and living on their farms. The complication of negro tenantry was absent. The problems were special ones, among which the economic aspects, particularly efficiency in production at lower costs and marketing and distribution, were most urgently in need of solution. Livestock and fertility problems loomed large. There was as much or more to be done, but it required a different organization and a different approach to accomplish results. A larger amount of self-help was essential and the resources of farmers had to be organized to bear upon these problems.[7]

Early County Agent Work in the North and West

While the demonstration work was successfully developing in the South there was a growing demand for full-time extension service to farmers in the North and West. We have seen how the farmers' institutes were forerunners of the county agent system. Many organizations and various methods of approach were evident in the northern and western states. Only a few examples are cited here. In Pennsylvania we must pass over the romantic story of A. B. Ross, a young corporation lawyer who rode about in a buckboard wagon asking farmers questions and giving them useful information, until he became permanently employed in Bedford County in 1910. The Pennsylvania State College in cooperation with the Office of Farm Management appointed four county agricultural agents in 1912.

> It was in Broome County, at Binghamton, New York on March 1, 1911, that the first county agent in the Northern and Western states was permanently established; and this was by the Chamber of Commerce. During the summer of 1910, partly as a result of the report of the Country Life Commission, of which L. H. Bailey was chairman, and partly aroused by a visit of the then Secretary of Agriculture, James Wilson, to inspect some of the work above referred to, and partly because Mr. Bailey and Mr. Wilson were impressed by the number of the apparently "abandoned farms" on the hills of Southern New York, Byers H. Gitchell, then Secretary of the Binghamton Chamber of Commerce, began the agitation for a "farm bureau," or department of the Chamber as a means of "extending to farmers the same opportunities for cooperation now enjoyed by the business men of this city."

[7] Burritt, p. 158.

The idea was aided and encouraged by the Delaware, Lackawanna and Western Railroad, which had planned a demonstration farm along its lines but which, on the advice of W. J. Spillman, gave up the plan and joined with the Binghamton Chamber of Commerce in the employment of a permanent resident county agent in Broome County. This railroad, due largely to the influence of its former general traffic manager, George A. Cullen, continued to aid this and other bureaus in New York state with its contributions and support up to 1920. Following a summer's study and survey of the situation by all the parties interested in the plan, including representatives of the State College and the Federal Department of Agriculture, an agreement was reached whereby the work was to be jointly financed by the Binghamton Chamber of Commerce, the Delaware, Lackawanna and Western Railroad and the U.S. Department of Agriculture. The State College of Agriculture, unable to contribute financially, was to "give advice and encouragement." The object of the plan as set forth in the formal memoranda was stated to be: "To undertake propaganda work in the agricultural district in the vicinity of Binghamton, New York, to make an agricultural survey of the territory, study the farmers' problems, find their solution by a study of the practices of successful farmers, study the relation of types of farming to local conditions of soil, climate, markets, etc., demonstrate systems of farming used by successful farmers of the district, and conduct demonstrations with farmers, do educational work through the media of institutes, etc., advising with the farmers individually and otherwise as to the best methods, crops, cropping systems, stock, labor, tools and other equipment." So with these worthy objects in view, in the spring of 1911, John H. Barron, farm reared, and a graduate of his State College of Agriculture, was established with an office in the Binghamton Chamber of Commerce as the first locally employed county agent in the Northern and Western states. The first year his only means of getting about was a livery horse and buggy, but this was soon succeeded by the all but universal county agent's Ford.

Though the program was ambitious, the results were not startling. Farmers were more or less indifferent. They felt that something was being done for them—some thought to them—in which they had little or no part. Their experience was that railroads and business men usually had some selfish object of their own in fostering such movements. They couldn't imagine such organizations absolutely unselfishly "helping the farmer"; and they felt, moreover, that they didn't need this kind of help.

As indicated in the statement of objects, the movement was from the outside, and though with the best of intent just another attempt of the city man to help the farmer raise more food for the consumer. It soon developed that the farmer was more interested in getting more money for what he did raise. Had not the agent been of a very practical turn of mind, a farm-reared boy who knew farmers, and a member of that old and worthy farmers' organization—the Grange—the effort must certainly have failed. As it was farmers—except a few of the most successful men—more or less disinterestedly tolerated it.[8]

In North Dakota the Better Farming Association was organized in 1912 and in Bottineau and Stutsman Counties agents were hired. Work began in corn selection, field demonstrations, county fair exhibits, boys' encampments, and farmers' meetings. A woman was employed as field agent and promoted the installation of home conveniences, rearrangement of kitchens, and better sanitation.

In Wisconsin county agent work began in 1912. Its distinctive features were (1) close connection with the county agricultural and teacher training schools, and (2) entire support by public funds.

In Missouri, Sam Jordan began work in April, 1912, under the sponsorship of the Sedalia Boosters' Club. The County Court, the Sedalia School Board, the Crop Improvement Committee of Chicago, and private subscriptions all had a part in financing this "apostle of agriculture" in the first county. The Missouri College of Agriculture and the U.S. Department of Agriculture began formal cooperation the next year. Mr. Jordan's title was county farm adviser and manager of the Pettis County Bureau of Agriculture. Meanwhile the College of Agriculture was laying the foundation for a broader county agent movement in the state.

In Illinois the county agent movement began in DeKalb and Kankakee counties where, in contrast to developments in some other states, strong, farmer-controlled county associations were formed. By 1914 there were fourteen county agents in the state, generally called agricultural or farm advisers. The college was chiefly advisory. While the services were normally available to the farmers generally

[8] Burritt, pp. 160, 161, 162.

and meetings were open to the public, some members felt they had a special claim on the activities and personal work of the agents.

The State of Colorado passed an act in April, 1913, authorizing county commissioners, "on petition of 100 taxpayers or farmers, to appropriate public funds for a county agriculturist, subject to the approval of the State Board of Agriculture."

In Indiana the beginnings of county-agent work were closely connected with the activities of the agricultural extension division of Purdue University established in 1911. The organization of county farm bureaus began two years later, greatly stimulated by the State Vocational Education Act, which directed the county councils to appropriate $1,500 for salary and expenses of a county agricultural agent whenever 20 or more residents of a county petitioned and deposited $500. The relation of the agents with the public schools was quite intimate. Their work was also supported by better farming associations, farmers' institute associations, farmers' clubs, granges, and other groups.

It is not possible here to dwell further on the interesting details of this work as it spread rapidly in the other states.

Farmers Take a Hand

As can be seen, much of the early promotion of county agent work was done by outside agencies of the government or by urban and commercial agencies. In some cases this caused farmers to hold aloof.

In New York, in Illinois and in Iowa, as early as the summer of 1913, the organization of county associations of farmers, variously known as county Farm Improvement, Soil Improvement, Better Farming and Farm Bureau Associations was begun on a paid membership basis. In the beginning practically the sole object of these associations was to cooperate with the public agencies in the support and management of the work of county agents. At this time this idea of cooperation or partnership with farmers, in the management of county agent work, received little or no support in most of the other states, or at the federal headquarters office at Washington, indeed, little attention was paid to it. But gradually, as it proved itself and as considerable numbers of farmers came to have a definite interest in and to give definite support to county agent work

through their associations, the interest in the idea increased, and it spread rapidly to many other states in the North and West.

Thereafter, county associations of farmers multiplied, and some states even required their organization in new counties before they would cooperate in the employment of a county agent. This plan developed some of the strongest county associations and programs of work. These county associations soon came to be known as "farm bureaus," and were officially recognized as "the county group of farmers cooperating with the college and the Department of Agriculture in carrying on county agent work." In some of the states these organizations and their functions were formally recognized by law as "public county associations."

Not until these cooperating county organizations were well established, and generally accepted officially as local cooperating institutions, could it be said that the county agent system was successfully and permanently inaugurated in the Northern and Western states. Its future was then guaranteed by farmers as well as by government legislation.[9]

Development of 4-H Clubs

As early as 1900, several district school superintendents started various clubs for boys and girls. Under the inspiration of Dr. Liberty Hyde Bailey, junior naturalist clubs and other clubs were organized in rural schools. Seaman A. Knapp began boys' clubs to demonstrate corn growing and crop rotation in his fight against the boll weevil. We have mentioned A. B. Graham who began club work for both boys and girls in Ohio in 1905.

With the passage of the Smith-Lever Act, O. H. Benson, who because of his work in Iowa had been appointed as an associate of Dr. Knapp, was called to Washington and placed in charge of boys' and girls' club work for the northern and eastern states. It was Mr. Benson who furnished the inspiration for the name "4-H," the motto, and much of the plan of organization that now followed. In 1915 there were 4-H Clubs in forty-seven states.

During World War I, the fourfold program of the 4-H Clubs was partially abandoned and the energy of the members devoted to raising food. Additional funds were provided, and a large staff of temporary agents was employed. The result was a rapid increase in the

[9] Burritt, pp. 170–171.

number of 4-H Clubs and club members. More than 1,000,000 4-H Club members were enrolled.

Following a period of readjustment after each World War, 4-H Club work has shown continual growth. Sound, long-time aims and objectives have emerged. The function of the club as an educational tool has come to be better understood. Some states have developed the work in close relation to the local school system while others have clubs established as a community program without school connections. Year-round programs, carefully outlined projects, county, state, and national contests, use of volunteer local leaders, recognition of success, and achievement in actual life situations are some of the characteristics of this work which now is known and copied the world over.

Development of Home Demonstration Work

It was natural for home demonstration agents who had entered homes in club work to find opportunities to aid the women with whom they came in contact. It was a process of natural evolution to move from helping the girls with canning to helping their mothers with simple, useful lessons in cooking, sewing, sanitation, and beautification. In the South, the year 1913 generally marks the beginning of extension work with adult homemakers, Negro as well as white. Their interest did not stop with the details of managing the household but included the larger needs of the home, broadening the vision of farm women.

Under the leadership of Martha Van Rensselaer who came to Cornell University in 1900 extension work in home economics began to develop in New York State. A home demonstration agent was appointed in Erie County in 1914. Utah began work in 1915, and the same year Miss Minnie Price began her long and useful career in Hampden County, Massachusetts, later becoming state leader in Ohio. World War I brought the appointment of many emergency agents in counties and cities. At the close of the war, the work was put on a permanent basis as funds and trained personnel became available. From the start, the development and use of local leaders (see Chapter XVI) to increase the amount of teaching has characterized this work.

By 1933, more than a million women and girls were active members of organized groups such as home demonstration clubs or home bureaus. By World War II, with the trained staff and local leaders available, a magnificent task was performed in the whole area of home economics.

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CHAPTER III

Basic Legislation and Development

TO HAVE a clear understanding of what is implied by the term *Cooperative Extension* one must understand the basic laws upon which the System has been built and the more important developments that have strengthened and improved it. It is a good illustration of the principle of "grants-in-aid" by the federal government to the states. That principle is a good antidote for too much centralized control and has many financial and social advantages. No attempt is made here to give an exhaustive treatment of the laws relating to the Cooperative Extension Service. The more important federal acts are cited with comments about their influence upon the Service (see Appendix for laws).

Smith-Lever Act of 1914

This Act is the foundation upon which our whole system of cooperative extension work was built. We have seen how the early pioneers in the farmers' institutes and other extension activities of the state colleges felt the need for a year-round service in the counties and for more adequate financing. A demand arose for federal appropriations for extension work. But six years were to pass after one early expression of this demand until it was finally answered in the form of the Smith-Lever Act. President Kenyon L. Butterfield of Michigan (and later of Massachusetts) was chairman of the committee on extension work of the Association of American Agricultural Colleges and Experiment Stations at the meeting in Washington in 1908 when a strong statement favoring such action was adopted. In the next six years various bills and many hearings oc-

cupied the time and energy of proponents of federal appropriations. The National Grange, the American Bankers' Association, the National Soil Fertility League, the National Committee on Agricultural Education, and the American Federation of Labor all had a hand in the growing movement. In its final form the Smith-Lever Act provides:

That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive the benefits of the land-grant act of 1862 and the Morrill college endowment act of 1890, agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture. . . .

That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.

A brief summary of four principal provisions of the act follows:

1. *Cooperative Character of the Work*
   a. It must be carried on in connection with the land-grant college, in cooperation with the U.S. Department of Agriculture.
   b. The act enables the use of plans which "shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State College of Agriculture."

Procedure: The director of extension draws up, through the state extension staff, plans of work that include the estimated funds necessary for personnel, expenses, and materials to carry them out, subject to the approval of the dean and trustees, regents, or curators of the land-grant institution. The plans are then forwarded to the di-

rector of extension, United States Department of Agriculture, who, with the federal extension staff, examines these plans for final approval.

2. *Finances and Availability*

In the first year (1914–1915), $10,000 was granted to each state without need of state offset. This sum continued annually. The next year (1915–1916) $600,000 was added, and $500,000 was added each year thereafter until 1922–1923. Additional appropriations had to be offset by a like amount raised within the state.

Distribution: The total appropriation, except the original $10,000, is divided among the states "in the proportion which the rural population of each state bears to the total rural population of all the states." (Compare with Bankhead-Jones Act, 1935.) Percentage is determined by the preceding federal census.

3. *Duplications or Offset*

After the original $10,000 has been paid to a state, no additional money may be allotted to the state "until an equal sum has been appropriated for that year by the legislature of such state or provided by state, county, college, local authority or individual contributions from within the state."

4. *Limitations. Funds may not be used for:*

   a. Rental or purchases of buildings or rental of land.
   b. Teaching at colleges.
   c. Agricultural trains.
   d. Printing (in excess of 5 per cent).

It was left to the states to determine which college or colleges should administer the funds. Each college was to make, annually, a detailed report of receipts, expenditures, and results to the governor of the state and the Secretary of Agriculture. The law gave the Secretary of Agriculture and state agricultural colleges joint approval authority. It established a national system of cooperative extension education which was soon to lead the world in methods and effect on rural life.

During the first two or three years of this act there were many administrative problems to be worked out. Within the U.S. Department of Agriculture it was decided to differentiate as far as prac-

ticable between research, extension, and regulatory work. This was an important policy which had its effect in the work to be done in the states. The Smith-Lever Act was interpreted to exclude farmers' institutes, short courses at the colleges, and correspondence courses. A "Memorandum of Understanding" between the state agricultural college and the U.S. Department of Agriculture regarding extension work in agriculture and home economics was prepared and used as a basis for procedures. The agreement had three principal parts, as follows (see also Appendix):

1. The state college agreed:

a. To organize and maintain a definite administrative division for the management and conduct of the work.

b. To administer all funds through such division.

c. To cooperate with the U.S. Department of Agriculture in all extension work which the Department was authorized to conduct *in the state.*

2. The U.S. Department of Agriculture agreed:

a. To establish and maintain a central office for the general supervision of all extension work.

b. To conduct all its extension work in the state in cooperation with the college.

3. It was mutually agreed:

a. That the work should be planned under the joint supervision of the state director and the responsible officer for the U.S. Department of Agriculture.

b. That all appointees should be joint representatives.

c. That plans should be made and executed by the states subject to the approval of the Secretary of Agriculture.

Generally speaking, the first three years of operation under the Smith-Lever Act settled the principles and methods for the permanent establishment of the system. Inevitable changes due to growth and emergencies were in store for the years ahead.

Capper-Ketcham Act of 1928

The object of this act was to aid the further development of the cooperative extension system as inaugurated under the Morrill Act

and the Smith-Lever Act. It provided that the work, cooperative in character, be given additional money for support, as follows:

1. $20,000 to each state and territory, first year and each year thereafter without state offset.

2. $500,000 after first year and each year thereafter, apportioned to states, in the same manner as Smith-Lever funds, offset by the state for a like amount required.

The money was to be subject to the same requirements as Smith-Lever money except:

1. Eighty per cent should be used for payment of salaries of extension agents in counties.

2. Restriction for promotion of agricultural trains should not apply.

Growing interest in club work stimulated the passage of this act. The requirement that 80 per cent of the funds were to be spent in the counties immediately expanded the service in the field. The work was to be "with men, women, boys, and girls." The words "boys and girls" do not appear in the Smith-Lever Act. Home economics work also expanded since the additional agents appointed were to be "men and women in fair and just proportions."

Bankhead-Jones Act of 1935

This act provided additional money for support of extension work (requiring no state offset). The chief provisions were:

1. $8,000,000 to be appropriated the first year, as follows:

(a) $20,000 to each state and Hawaii.

(b) Remainder of $8,000,000 to states in the proportion which the farm population of each state bears to the total farm population of all the states (compare this with the Smith-Lever Act).

2. $1,000,000 additional each year for next four years apportioned on the basis of farm population, making a total of $12,000,000.

3. Appropriations for resident teaching and for research.

This act was passed to enable the extension service to carry on educational work for various agencies of the U.S. Department of Agriculture which had come into being since 1933, and which resulted in a temporary change in the nature and amount of extension

work in some states. The increase in funds resulted in expansion of home demonstration work in succeeding years. It was generally agreed that apportionment on the basis of farm population was a wise provision, although it did not help the sparsely settled western states.

Bankhead-Flannagan Act of 1945

These are additional funds, not in substitution for sums appropriated through the Smith-Lever and other acts supplemental thereto.

The purpose is to develop further the cooperative extension service, *particularly county extension work*. Funds authorized are set forth in the law as follows:

(1) $4,500,000 for the fiscal year ending June 30, 1946, and each subsequent fiscal year;

(2) An additional $4,000,000 for the fiscal year ending June 30, 1947, and each subsequent fiscal year; and

(3) An additional $4,000,000 for the fiscal year ending June 30, 1948, and each subsequent fiscal year.

(b) The sums appropriated pursuant to this section shall be paid to the several States and the Territory of Hawaii in the same manner and subject to the same conditions and limitations as the additional sums appropriated under such Act of May 8, 1914 [the Smith-Lever Act], except that—

(1) not more than 2 per centum of the sum appropriated pursuant to this section for each fiscal year shall be available for paying expenses of the Extension Service in the United States Department of Agriculture;

(2) $500,000 of the sum so appropriated for each fiscal year shall be allotted among the States and the Territory of Hawaii by the Secretary of Agriculture on the basis of special needs due to population characteristics, area in relation to farm population, or other special problems, as determined by such Secretary: *Provided*, That not to exceed 10 per centum shall be allotted under this subparagraph to any one State or the Territory of Hawaii for any fiscal year; *Provided further*, That these funds shall be matched by the State or Territory receiving them, on the same basis as other funds under this Act; and

(3) The remainder of the sum so appropriated for each fiscal year shall be paid to the several States and the Territory of Hawaii in the

proportion that the farm population of each bears to the total farm population of the several States and the Territory of Hawaii, as determined by the census of 1940.

This law placed emphasis on broad matters such as standards of living, better marketing and distribution, work with out-of-school youth, farm and home buildings, and nutrition. It gave funds which enabled the states to broaden the scope and influence of their programs. A review of this legislation raises an interesting question. What did the early founders of extension work regard as its purpose?

What Pioneers and Leaders Thought

The following interpretations of the objectives of extension work were made by early leaders and legislators:

To readjust agriculture and place it upon a basis of greater profit, to reconstruct the rural home, and to give country life an attraction, a dignity and potential influence it has never received.—*Dr. Seaman A. Knapp,* U.S. Department of Agriculture.

To teach those who have a desire for information, and to create a desire for information in those who do not yet have the desire.—*Dr. Liberty H. Bailey,* Cornell University.

To teach the farmer the best methods of increasing production is exceedingly important, but not more vitally so than is the importance of teaching him the best and most economical methods of distribution. It is not enough to teach him how to grow bigger crops, he must be taught to get the true value for these bigger crops, else Congress will be put in the attitude of regarding the work of the farmer as a kind of philanthropy. The itinerant teacher or demonstrator will be expected to give as much thought to the economic side of agriculture, to marketing, standardizing and grading of farm products as he gives to the matter of larger acreage and yields. He is to assume leadership in every movement whatever it may be, the aim of which is better farming, better living, more happiness, more education and better citizenship.—*Hon. A. F. Lever,* Chairman of the House Committee on Agriculture and co-author of the Smith-Lever Act.

Now, the purpose of this bill [Smith-Lever] is to help the tillers of the land to discover the hidden riches of the soil, to devise methods of cultivation which will lessen the burden of farm life by shortening the hours

of drudgery, and render more productive the land. Its splendid purpose is to improve the man, enlarge his mental horizon, and give intelligent direction to his efforts. The effort also will be to add comforts to the country home, lighten the burdens of woman, afford greater opportunities to the boys and girls upon whose shoulders soon must fall the responsibility of home and the burdens of government.—*Senator Vardaman.*

These objectives are stated in the Smith-Lever Act:

To aid in diffusing among the people of the United States useful and practical information in subjects relating to agriculture and home economics, and to encourage the application of the same.

That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise.

The following statements were made after the Smith-Lever Act had been in operation for several years:

Our largest objective, whether we are dealing with our own programs or helping with others, is the development of strong self-reliant men, women, boys, and girls, and of good rural citizenship in the open country.—*Director L. R. Simons*, New York State College of Agriculture.

It [the Extension Service] is a partnership agency in which the officials of government—federal, state, and county—sit in council with rural people and together analyze local conditions, take stock of their resources, and make and help to carry out programs for the financial, educational, and social benefit of the community and its individual members.—*M. L. Wilson* ("What Agricultural Extension Is," March, 1944).

Boys and girls . . . should be assured of the opportunity in 4-H Club work of being artists as well as workers; of being service-bearers to the world, as well as being profit-takers for themselves; of being truth-builders, as well as being busy in affairs. We must recognize and admit to all concerned that the 4-H Club work is essentially an educational process affecting the habits of workmanship; habits of individual thought and behavior; habits of social thought and behavior of the boy and girl, at the same time that the club work is building up an outside industry called

agriculture.—*Dr. C. J. Galpin* ("4-H Club Work—Old and New Objectives," U.S.D.A., 1930).

In discussing "Goals of Extension Work," F. D. Farrell, when president of the Kansas State College of Agriculture, mentioned five objectives that he considers to be of major importance in extension work:

To develop understanding and appreciation of rural values.
To promote an understanding of rural problems.
To develop practical methods of solving rural problems.
To make rural life more satisfying and beautiful.
To promote improved integration of farming and rural life with other activities and interests of the nation.

Martha Van Rensselaer has been described as a pioneer in extension work for women. The words of her personal friend and fellow director, Flora Rose, interpret Miss Van Rensselaer's ideal of home economics education:

The ideal upon which home economics was conceived was, like Martha Van Rensselaer herself, magnificent in its simplicity. . . . Its concern was to enrich the daily lives of women . . . to make meaningful to them the tasks which were theirs to perform, by the creative use of the experiences which the average woman's environment supplies. . . . It was conceived as a means by which women's minds could be trained, their capacities released, and their deepest desires satisfied through growth in understanding and direction of their own normal social functioning.

The Home Bureau Creed has been widely used to show the general objectives of the Extension Service:

To maintain the highest ideals of home life; to count children the most important of crops; to so mother them that their bodies may be sound, their minds clear, their spirits happy, and their characters generous:

To place service above comfort; to let loyalty to high purposes silence discordant notes; to let neighborliness supplant hatreds; to be discouraged never:

To lose self in generous enthusiasms; to extend to the less fortunate a

helping hand; to believe one's community may become the best of communities; and to cooperate with others for the common ends of a more abundant home and community life:

This is the offer of the Home Bureau to the homemaker of today.—*Ruby Green Smith*, formerly New York State Leader of Home Demonstration Agents.

Development of the Service

The basic laws have furnished the money, direction, and structure of the service. The responsible officers appointed under these laws had to work out agreements and procedures to make the law operative in the first place and to keep it adapted to changing times through the years. Much has been done to bring about needed adjustments and improvements through the Association of Land-Grant Colleges and Universities. The Amherst Conference of 1916 [1] reached a decision on various administrative difficulties, the more important of which were: (1) all work within the states should be done through the directors of extension; (2) an effort should be made to differentiate between educational and regulatory work as carried on by the U.S.D.A.; (3) the national office should not appoint subject-matter specialists for service within the states, except as they were to work with the directors; (4) national and district conferences were to be called jointly. Several other matters regarding finances and reports were covered.

The Mount Weather Agreement of July, 1938,[2] established a system of coordinated land-use planning to correlate existing action programs in the field and to help guide the formulation of future programs. The efforts of county land-use planning committees were to be correlated by a similar statewide committee. These agreements were important documents that need not be described in detail here, but they serve as milestones marking the progress of development within the service. The demand for food during World Wars I and II greatly stimulated the growth of extension work. This develop-

[1] A. C. True, *A History of Agricultural Extension Work in the United States from 1785 to 1923*. (U.S.D.A. Miscellaneous Publication No. 15, October, 1928), p. 133.

[2] John M. Gaus and Leon O. Wolcott, *Public Administration and the U.S.D.A.* (Chicago: Public Administration Service, 1940), p. 157.

ment, together with relationships to other agencies, is dealt with in later chapters.

The need to extend the benefits of extension work to the rural Negro population was early recognized. The first Negro agent was appointed in 1906 by the U.S. Department of Agriculture in cooperation with Tuskegee Institute in Alabama, and another was appointed in cooperation with the Hampton Institute in Virginia. When the Smith-Lever Act went into effect there were 100 Negro men and women agents in 11 states. Since then the number of workers has continued to increase, and the work has become well adapted to the needs in the field. Both white and Negro agents have done much to improve relations between the races and to improve living conditions among Negro farmers.

The outstanding developments in the Extension Service are published each year as the reports of the state and national directors of extension, and, in a much briefer form, as part of the annual Report of the Secretary of Agriculture.

PART II

How the Extension System Works

By a system of federal grants-in-aid to the states, followed by agreements and approval of plans, this nation-wide system of education has brought its teaching to adults and youth on farms and in homes.

The work is carried on by more than ten thousand paid trained workers and thousands of volunteer workers serving through the sponsoring organizations to develop and carry out the program.

The Extension Service maintains cooperative relationships with all government and private agencies and organizations having responsibility and interest in the same field.

CHAPTER IV

The Organization

THE EXTENSION SERVICE is a cooperative arrangement between the land-grant institutions and the United States Department of Agriculture. It is legally known as Cooperative Extension Work. There is an Extension Service for each state, each territory, and the United States Department of Agriculture. They are bound together through agreements in line with the basic federal extension legislation, the Smith-Lever Act. This act provides that "there may be inaugurated in connection with the college or colleges in each state now receiving . . . the benefits of the act of congress approved July second, eighteen hundred and sixty-two (First Morrill Act) . . . agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture. . . ." Each state Extension Service thus is, by law, a part of the land-grant institution for the state.

The memorandum of understanding between land-grant institutions and the Secretary of Agriculture, which has been the basis on which extension work of the agricultural colleges and the U.S. Department of Agriculture has been conducted since the passage of the Smith-Lever Act on May 8, 1914, provides that the state cooperating institution will organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, with a responsible leader selected by the college and satisfactory to the Department of Agriculture.

The state director of extension is selected by the governing body of the state institution, with the approval of the United States De-

partment of Agriculture, to head a division of that institution concerned with Cooperative Extension Work. In some states the cooperating land-grant institution is the state university; in others it is a state college.

The State Extension Service

The plan of organization of state Extension Services may be classified into distinct types. There are variations from each type, but in general the following descriptions apply.

In some states the dean of the college of agriculture is also director of the Cooperative Extension Service. A variation of this is where the dean is also director with an assistant, associate, or vice-director in operational charge of extension work. In others there is a director of extension responsible to the dean of the college of agriculture.

Another type is the university with state colleges of agriculture and home economics. The director of extension is responsible jointly to the deans of both of these colleges for their cooperative extension work.

Then we find state colleges with the director of extension responsible to the president of the institution. This director may, also, be responsible for all extension done by the institution, general and cooperative.

Regardless of the type of state organization the basic unit is the county Extension Service. The organization of the state Extension Service is arranged to do those things which the county Extension Service cannot do readily or easily. A look at the composition and work of a county Extension Service will help us understand the organizational pattern for a state Extension Service. The county Extension Service is composed of the professional and secretarial staffs and the rural leaders. The number in each group varies with the size, population, and agricultural development of the county. In a number of states, in the place of assistant agents who do 4-H Club work, there are county 4-H Club agents. The professional staff is assisted by one or more secretaries.

Rural leaders furnish local guidance, information, and support in planning, executing, financing, and furthering extension work.

The county Extension Service undertakes to develop a program combining the knowledge and skill of local people with the knowledge of the college obtained through research. The staff of the county Extension Service is organized to enable the people to utilize all resources and facilities to carry out the program. Plans of work are made to reach the objectives of the program. Every effort is made to inform the public about the program and progress made.

State Extension Services are organized to help the county Extension Services perform their functions. There is a line organization composed of directors, supervisors, and county extension agents. The titles for these positions vary state by state. Through this line organization pass the administrative and supervisory responsibilities of the service. Some of these are: organizing the service for most efficient work; personnel selection; training and management; determining and carrying out policies; developing programs and making plans to carry out the purposes and objectives of the program; evaluating the effectiveness of the organization and of the work to the public; arranging for funds to finance the work; establishing and maintaining satisfactory relationships between the college and the county cooperating groups; and reporting to officials and to the public. Authority flows through the line organization.

A county Extension Service needs specialized assistance. Methods of teaching, of presenting information, and of organization, as well as subject matter, are some of the kinds of specialized help required. Such specialized help is given by the state Extension Services through its staff organization composed of specialists in various subject-matter fields. These extension specialists keep county workers informed on research developments and interpret data so that it may be properly applied toward the improvement of farm, home, and rural conditions. The specialist performs a staff function and is not responsible for administrative matters. He is responsible to the state director, or to the head of his subject-matter department, or to both. The subject matter he teaches is in harmony with that used in cam-

pus teaching and has been recommended by the research departments of the college. In many institutions specialists are housed with their respective college departments.

The state Extension Service includes a group of offices whose functions are to service the operation of the entire organization. Accounting and editorial offices are examples of these auxiliary offices.

Functions performed by personnel in such activities as information, radio, visual aids, and exhibits are similar to those performed by other specialists when they are training county workers.

The director is responsible for evaluating the results of the program and the work of the staff. This requires an evaluation procedure under the guidance of a specially trained staff member who is responsible to the director. These persons may also serve in a specialist capacity when training other staff members in evaluation methods.

To summarize what we have said about the organization of a state Extension Service we find that each has line officers with administrative authority and supervisory responsibility, staff officers, and auxiliary offices to service the organization.

County Extension Service

In addition to the memorandum of agreement between the land-grant college and the United States Department of Agriculture mentioned above, there is also an understanding between the state and counties for the conduct of extension work in each county. In some states this understanding is implied; in others it is in the form of a definite memorandum. The cooperating group within the county may be the informal leadership through which county agents work; it may be a definite organization which, in many states, has a legal basis for cooperation; or it may be the governing body of the county. This group has either legal or implied responsibilities for jointly directing the work in the county with the state Extension Service, determining programs, approving personnel and plans, determining budgets, providing the local funds necessary to finance the program, and carrying out agreed plans.[1]

[1] For a graphic presentation of the main types of organization, see *County Extension Organization*, U.S.D.A. Extension Service Circular No. 448 (March, 1948).

The group of directors present at the administrative workshop at Madison, Wisconsin, in 1946 had this to say about the county extension staff organizations:

> The organization of the Cooperative Extension Service is unique. It establishes a cooperative relationship between agencies of federal and state governments, and these in turn enter into cooperation with county governments and sometimes with local sponsoring groups in matters relating to additional finances, employment of personnel and activities to be carried on. There is a large amount of autonomy at state and county levels. In order to meet the needs of rural people, county extension agents have had a remarkable amount of freedom in planning and executing local programs. Also state staff members have had similar freedom in developing their respective program responsibilities. Administrative direction has been kept to a minimum. However, in recent years developments have taken place which establish a need for more effective organization of the county extension staff and the state staff set-up to service the county organization.
>
> 1. The scope of extension work has broadened.
> 2. The number of extension employees has greatly increased, especially in the county.
> 3. There is a larger numbei of agencies dealing with farm problems.
> 4. The public relations job has become heavier.
>
> The county extension office is the unit by which the objectives of the Cooperative Extension Service are attained as it works with rural people. The members of the county staff are key people in the extension organization. They perform these main functions:
>
> 1. As teachers they help rural people to discover and understand their problems and acquaint them with possible solutions and encourage their adoption.
> 2. As organizers they help farm people to understand how group action may improve their situation.
> 3. As leaders they are alert to situations affecting the welfare of farm people and help them to find solutions to problems arising from these situations.
>
> More specifically the county extension agents act as local representatives of the State Land-Grant Institutions and the United States Department of Agriculture. As such in each county they must maintain an efficient county center and office for serving farm people. This requires

local responsibility for management of office, budget and expenditures. In their activities the agents cooperate with representatives of other agencies whose programs are in the interest of rural people. They develop rural leadership in order that people assume responsibility for helping themselves. They assist in providing auxiliary services which facilitate action on recommended practices, and they have responsibility for maintaining good public relations and keeping the public informed on program activities. To do these things well there is an executive function that must be recognized and further developed. Consideration of certain elements essential to efficient administration suggests various methods of developing and improving the executive function in county extension offices.

It is important that persons carrying out the executive functions of the county extension office do so in the spirit of the Cooperative Extension Service and with a sincere desire to harmonize the efforts of the county staff.

There are at least three plans to obtain the necessary administrative direction. One of these is the designation by the state director of one of the agents to be county director or to have a similar responsibility. Another plan used is to consider the agents in the county a committee with one agent named as chairman. The function of the chairman is to obtain coordinated action. Still another plan is for administration to clear through each agent directly, depending upon frequent consultations to avoid confusion.

Regardless of the county organization, a regular weekly conference of the professional staff is desirable as a means of assigning and explaining duties and responsibilities, planning future work, and getting a better understanding and distribution of work. Each person attending discusses the work planned for the future and the amount of time and materials that will be required.

The rural leadership of the county and community is a definite part of the extension organization. In this section we have discussed the local sponsorship for extension. This sponsorship is furnished by rural leaders either informally or formally, depending on the state laws dealing with cooperative extension work. State laws range from not mentioning local sponsorship at all to the "spelling out" of duties, powers, and composition of the county extension sponsoring

group. The principle to remember is that extension work is a partnership enterprise. Some recognized body in the county with whom to cooperate is a necessity. (See also page 142.)

National Extension Service

The Extension Service of the U.S. Department of Agriculture exists to do things which the state Extension Services cannot do readily or easily. It mobilizes, interprets, and prepares the resources of the United States Department of Agriculture for the use of state Extension Services. It interprets area, national, and international situations. It obtains and organizes the active cooperation and support of regional and national groups. It approves appointment of each state director of extension. It approves cooperative projects that involve the use of federal and federal-offset funds. It informs the public about state extension programs and the progress made toward carrying them out.

It is obvious that to do these things the national Extension Service must have a staff, line officers, and auxiliary offices. There are administrative and supervisory jobs to do. There is work to be done of a service character for the organization.

The pattern of organization changes in detail from time to time. The principles are similar to those described for a state Extension Service. The director of the Extension Service of the U.S. Department of Agriculture is responsible to the Secretary of Agriculture. He has persons under his direction to help him carry out the functions of the Cooperative Extension Service; these administrative, supervisory, and specialized personnel assist the state Extension Services in those fields that relate to the work of the national Extension Service.

Thus, the Cooperative Extension Service organization has three major units: the county, the state, and the nation. Each has an organizational pattern adapted to the work of the unit. These patterns vary in detail according to the legislative enactments and to institutional concepts. Three lines of work run throughout—administrative, supervisory (specialized and general), and organizational services. The Cooperative Extension Service is a branch of the

land-grant college system extended to include cooperation with people in the respective counties.

OUTLINE OF ORGANIZATION, COOPERATIVE EXTENSION SERVICE

This chart shows the levels at which government may give authority and funds to the various parts of the service. Contractual relationships are covered by written agreements, for example, between the land-grant college and the U.S. Department of Agriculture, between land-grant colleges and the counties, and in some states between the county government and the sponsoring organization. Cooperative relationships run throughout the service. Note that the Cooperative Extension Service is a branch of the land-grant institution.

Federal Congress	United States Department of Agriculture Secretary Director of Extension (one of many divisions in the department)
State Legislatures	Land-Grant Institution President of Governing Board Colleges of Agriculture Research Teaching Cooperative Extension Service Director of Extension Supervisors and Specialists Other Colleges *
County Government	County Sponsoring Organization † County Extension Service County Extension Agents
Citizens	Leaders, Members, and Cooperators

* Other colleges such as those of home economics, veterinary, mechanics, and arts cooperate as part of the land-grant institution.

† This may be formally created by state law or may be an informal organization.

Types of Work

The basic fields of work are agriculture and home economics, in which men, women, boys, and girls participate. There are divisions or types of work that cut across both fields. For example, most of the

northeastern states have 4-H Club agents with state leaders and a line organization. In the South, club work has long been considered the responsibility of the agricultural agent and the home demonstration agent. Club work is distinguished by the fact that it works primarily through clubs and utilizes volunteer local leaders. It offers projects in a wide variety of subjects.[2] It naturally handles the subject matter in a manner adapted to the needs of its age group. Many states publish a list of 4-H Club projects available to boys and girls. Detailed instructions are given to each member enrolled.

Extension personnel are also giving full time to older rural youth work in certain states. The term "older youth" has been defined to mean persons in the age group of 18 to 25 years. Since about 1930, there has been a general awakening to the needs of young people on the part of churches, granges, and farm organizations. The Extension Service is trying to aid this group in every way.

Agricultural agents are concerned with the business of farming and frequently work on production and marketing problems with commodity groups and individuals. Home demonstration agents have distinguished their work by the training and use of large numbers of local leaders who carry subject matter and skills back to their homemakers' units. They have also demonstrated ability to handle community and public problems. Extension work with Negroes has many types of work within itself. Urban work in home economics and in consumer education is emerging as a large field. The best picture of what is being done in each type of work will be found in the published annual reports of any county or state extension service.[3]

The expansion or maintenance of various types of work or the use of specialized county workers is a matter of state policy, available finances, and administrative procedure. Regardless of the type of organization or of the changing procedures, the principles of program planning and extension education apply.

Organization for Extension Work. Example—State of Missouri

In Missouri, the director of extension is responsible to the dean of the College of Agriculture of the University of Missouri. There

[2] See p. 123 for member's pledge.

[3] For example, see *Progress of New York State Extension Service*, Cornell Extension Bulletin 699 (July, 1946).

are two assistant directors. One of these assistants is responsible for all personnel selection and records, supervision of county extension work, office management, budgets, approval of publications, and other administrative duties as assigned. The other assistant director is responsible for coordination of the work of specialists, primarily in two areas—balanced farming and public policies.

The director is also assisted by a state home demonstration agent who supervises the work of home economics specialists, supervisors, and agents and is responsible for relationships with the College Department of Home Economics.

There are five districts supervised by ten state extension agents, a man and a woman for each district. This group meets weekly under the chairmanship of the assistant director.

There is also a state club agent for each supervisory district. These state club agents work under the direction of a designated chairman. This staff is responsible for work with 4-H Clubs and rural youth.

The agricultural editor's office does the information work for the experiment station, campus teaching, and the extension service. Radio, visual aids, circulars, and bulletins are responsibilities of this office.

Specialists, supervisors, and other members of the staff are assigned to problem committees. Examples of these are rural youth, rural policy, balanced farming, health, and recreation. These problem areas were suggested by a state advisory committee of rural people. This committee is composed of twenty people, approximately equally divided between men and women, elected yearly by and from county extension leaders in five district meetings. This state advisory committee also has subcommittees for each of the problem areas. At two meetings each year the subcommittees make recommendations to the Extension Service concerning work in each field. The problem area committees of the extension staff use these recommendations plus suggestions from the county extension leaders and agents to prepare phases of the state plan of work.

Specialists are responsible to the director. They are selected by the director, subject to approval by heads of college departments. The agricultural specialists are housed with the departments. Home

economics specialists are housed with the extension service. All specialists assist with all problem areas. The problem committee is responsible for direction of the work.

A program has been developed for each county by leaders, agents, and state staff members. One fifth of this program is revised yearly.

One plan of work is prepared yearly for each county by the agents

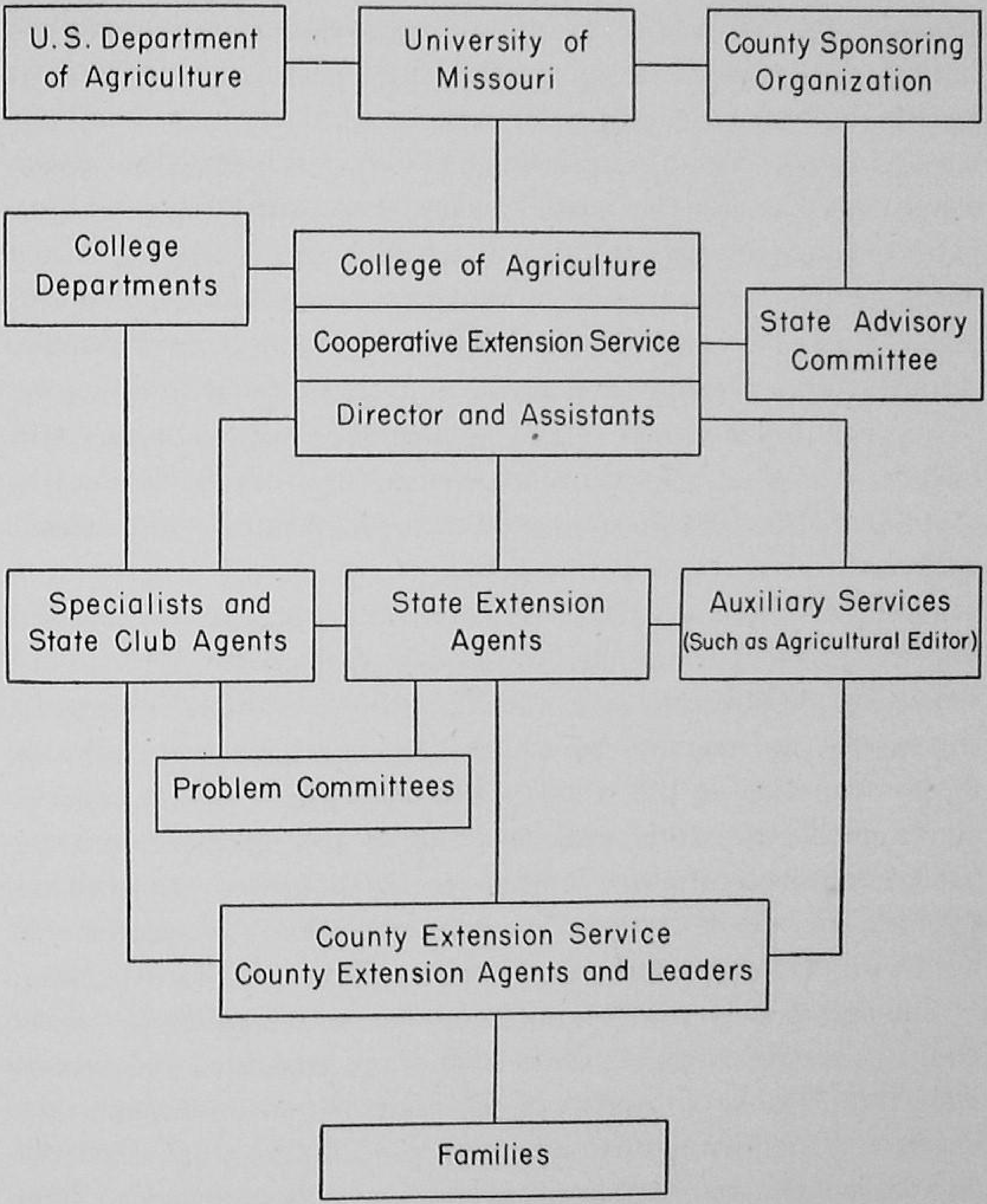

Figure 5. Diagram of the Cooperative Extension Service in Missouri, showing a line organization from the state director of extension to the county through the state extension agents.

based upon the county program and suggestions from state staff members. All agents in the county use this plan, which is revised at weekly office conferences. Division of work is decided upon by the agents according to abilities of individual workers and economy of operation.

There are 114 counties in Missouri. Each has a county extension service. The state law requires an organization which will be responsible for the local financing and for assisting in planning and supervising county extension work. This organization must be incorporated and must have a membership of at least 250 adults interested in agricultural improvement. The expenses of the county extension office and the travel of agents are paid from funds provided from sources within the county, largely county appropriations which are mandatory for a minimum amount established according to the assessed valuation of the county. A maximum is established according to rural population as shown in the latest Federal Census.

The board of directors of the sponsoring organization generally includes one or more persons from each township in the county, composed of an equal number of men and women. The board's function is to act for the rural people of the county in all matters dealing with the Cooperative Extension Service. The board enters into an agreement with the Agricultural Extension Service of the University of Missouri, approves all county extension workers for the county, and employs the county extension office secretaries on recommendation of the county extension agents. The board also agrees on the extension work to be done and assists in selecting leaders and demonstrators. It hears reports of agents, examines and approves all bills of the county extension service, and advises with agents on planning future extension activities.

The agents work as a committee under the chairmanship of the county agricultural agent. Their salaries are paid from federal and state funds by the University of Missouri. In many counties extra workers, above two agents, are jointly paid by the state Extension Service and the county sponsoring board to work on balanced farming or on other special pieces of work.

Organization for Extension Work. Example—State of New York

In New York, there are two state colleges doing Cooperative Extension Work. But there is one director of extension. Subject to the authority of the deans of the Colleges of Agriculture and Home Economics, the director of extension has over-all administration of the extension programs of both colleges. He is appointed to represent both the state and federal governments in handling this responsibility. He is assisted by several administrative specialists and state leaders. All fiscal records are handled by the director of finance of the state colleges.

There are three state leaders, one for each type of agent in the counties, that is, state leader of county agricultural agents, state leader of home demonstration agents, and state 4-H Club leader. Each of these leaders has four or five assistants whose work is often assigned on a regional or district basis. The assistants also have certain state-wide responsibilities in the division of labor that is required in relationships and subject matter, the women dealing with home economics and recruiting of women agents and the men having similar responsibilities in agriculture. They make their headquarters at the colleges and not in the field as district agents do in many states. They are supervisors of agents and work on relations, program building, selection, and training and maintenance of personnel in the counties.

All specialists are attached to their respective subject-matter departments and are responsible to the head of the department for the technical matter they teach. In the main, in the College of Agriculture all extension specialists are scheduled through the extension specialists' scheduling office and in this respect are also responsible to the director of extension. In the College of Home Economics the specialists arrange their own schedules with the counties, working closely with the state leaders who supervise the counties. Specialists in 4-H Club work are employed by each college according to the various needs.

A large Department of Extension Teaching and Information

handles the editorial work, news, radio work, visual aids, motion pictures, and photography. This department is responsible also for all publications, such as bulletins and their distribution to counties

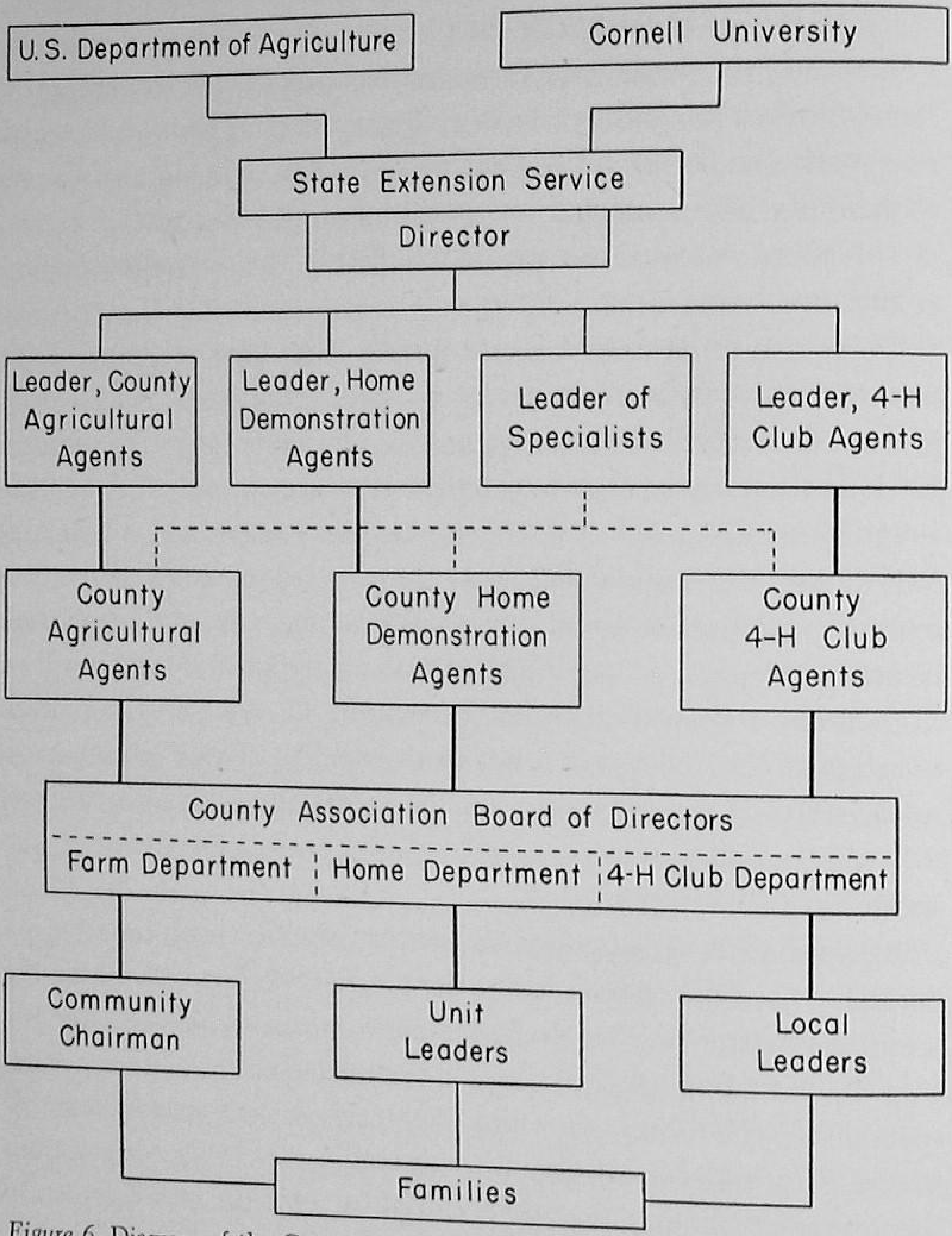

Figure 6. Diagram of the Cooperative Extension Service in New York, showing three coordinated lines of work from the state to the county.

and to individuals, and for correspondence courses. Undergraduate training of prospective extension workers is done through this department by credit courses in the College of Agriculture. Training

courses for home demonstration agents are given in the College of Home Economics. Study at the graduate level is also available.

Staff meetings are called by the director of extension from time to time in accord with the needs of the service. Numerous standing committees are at work on state-wide assignments, such as the type-of-farming or commodity committees that prepare outlook and situation materials to send to the counties for program planning. A joint committee of the two colleges, called the Advisory Council on Extension Education, functions on training and graduate study for extension workers. A Policies Committee on Extension Studies also represents both colleges. Besides these, the staff may express itself through any of four organizations, since each type of county agent has a state association with officers and committees, and college specialists have an Extension Club which meets monthly and has an active program of professional improvement and coordination. County workers also have their own district meetings in which they discuss common problems. The Annual Extension Conference is supplemented by an induction training school for new agents and by numerous in-service subject-matter schools, or workshops.

A state Rural Policy Committee is composed of seventy farm men and women who are called to the colleges for advice and counsel. Their findings are published for the guidance of all organizations interested in rural life.

In each of the fifty-six counties of the state there has been created, pursuant to law, a subordinate governmental agency consisting of an unincorporated association cooperating with Cornell University for the support and maintenance of extension work, under a memorandum of agreement. This agency is an Association, with three departments and three budgets, but the work and finances of each is subject to approval of the board of directors of the Association. The Association also has a Memorandum of Agreement with the county government (board of supervisors). Its work is purely educational with no commercial activities. Membership fees are voluntarily contributed annually and become public funds in the treasurer's custody. Programs and plans of work are prepared by various methods. Each of the three departments has an agent and one or more assistants.

The agents' services are available to members and nonmembers alike. A senior agent is chosen, on the basis of length of service in the county, to represent the director of extension in presenting matters of mutual concern to all agents and to the Association directors, and in aiding the president of the association in the execution of his duties. Older youth work is promoted and supervised by district agents employed expressly for this purpose and by several state specialists who give it full time. Older youth work in the counties is carried on by the 4-H Club agent or either of the other agents in accordance with local decision.

The Association employs the agents, selecting them from candidates recommended by the state leaders, who generally meet with the executive committee of the departments concerned when agents are hired. Agents are members of the State Retirement System but are not civil service appointees.

REFERENCES

Egger, Rowland. *Public Administration and Extension Work.* Washington, D.C.: U.S.D.A. Extension Service Circular No. 451, 1948.

Joint Committee Report on Extension Programs, Policies and Goals, U.S.D.A. and Association of Land-Grant Colleges. Washington, D.C.: U.S. Government Printing Office, August, 1948.

CHAPTER V

Financing the Work

THE COOPERATIVE feature of extension work is well illustrated in the way it is financed. Federal, state, county, and individual funds are all a part of the total extension budget. In Chapter IV we described the cooperative organizational features. In the chapters on program building we describe the cooperative development of a program for extension work. Extension work is thus cooperatively planned, financed, and carried out. The framers of the original extension legislation held fast to this principle.

Another principle of the federal legislation authorizing extension appropriations is that funds are allocated according to the size of the job to be done. As shown previously, in some laws distribution is determined by using the size of rural population, while in others it is based upon the size of the farm population. The number of people to whom instruction should be given is the determining factor rather than the ability to pay.

These two principles are unique in educational legislation—cooperative financing for a cooperatively planned and carried out program and the distribution of funds according to the size of the teaching job to be done. There are variations in the details, but the principles are constant throughout all federal extension legislation. A review of Chapter III will show the financial arrangements provided in the various federal acts.

Federal Grants-in-Aid

The term "federal grant-in-aid" is generally understood to refer to financial assistance from the federal government. The important

and distinctive features of the procedure used will bear attention. When Congress determines that certain action is in the national interest it must determine next how to start work. Since the federal government derives its powers from the states constitutionally, the concept of utilizing existing state governmental machinery to administer the work was a wholesome outgrowth of living among united states. By determining in advance what shall be required of the states in the form of plans and standards of performance, the federal government has found a very useful and democratic method of stimulating a national policy or program without actually reaching out the long arm of federal operations directly into the states. The Smith-Lever Act of 1914 pioneered in this field through extension work. Federal aid to highways followed. Later the Social Security Act used the device of grants-in-aid to meet certain problems in which state action seemed too slow or inadequate. It is used as a means of inducing the localities to undertake desirable work. Supervision follows the funds, but arbitrary administrative action is at a minimum. The land-grant institutions set up under the Morrill Act of 1862 have served as a nucleus around which a number of services have been organized for the benefit of agriculture and country life. Payments to states under federal aid laws now run into millions of dollars.[1]

Funds of Federal Origin

Extension financing from funds of federal origin is based upon the original cooperative extension legislation—the Smith-Lever Act. All major bills appropriating federal funds for extension passed since the Smith-Lever Act have been for the purpose of furthering the development of cooperative extension work as inaugurated under its terms. This act was a further development of earlier legislation that established the land-grant college system. There are four main features in the determination of allocations in present federal laws providing grant-in-aid funds to states:

[1] Key, V. O., Jr., *The Administration of Federal Grants to States* (New York [261 Broadway]: Committee on Public Administration of the Social Science Research Council, 1937).

1. A flat amount to each state which helps provide at least a minimum skeleton extension setup for each state.

2. Division according to farm population, which appears to favor certain states.

3. Division according to rural population, which appears to favor certain other states.

4. A fund appropriated to the Secretary of Agriculture for allocation in accordance with relative need.

In addition to these basic acts inaugurating and developing the cooperative extension service, appropriations of funds are made by Congress for the administration and coordination of extension work by the Secretary of Agriculture through the Extension Service of the U.S. Department of Agriculture.

Table 1 shows sources of funds allocated for a specific year. Estimates for 1948 are given to illustrate the amounts involved in the various federal appropriations for cooperative extension work.

As indicated in the discussion of the various federal acts, certain amounts are required to be offset by matching appropriations made either by state legislatures or county governments or by contributions from within the state. Table 1 shows that less than half of the federal payments required offset. It also shows that the states put in more money than the federal government.

State and County Funds

The source of funds from within the states further demonstrates the cooperative principle of extension work. States, counties and farmer groups have furnished approximately half the funds and the federal government half. One of the strongest features of cooperative extension work is cooperative financing.

State legislative appropriations are, in most cases, made to the land-grant institution for expenditure for cooperative extension work. These funds are handled by the fiscal departments of the land-grant institution at the direction of the state director of extension.

County funds either are appropriated to and administered by a county cooperating sponsoring board or group, or are appropriated and administered by the governing body for the county. The first

Table 1. Sources of Funds Allocated for Cooperative Extension Work in the States, Alaska, Hawaii, and Puerto Rico for the Fiscal Year Ending June 30, 1948, showing the Funds from Federal Sources Requiring Offset by States and Territories, Those Not Requiring Such Offset, and the Basis of Distribution.*

Item	Total Allotment 1948	Amount to be paid without offset	Amount requiring offset and basis of allotment	
Permanent annual appropriation (Smith-Lever Act)	$ 4,704,710	$ † 500,000	$ 4,204,710	Rural population
Capper-Ketcham Act	1,480,000	‡ 980,000	500,000	" "
Bankhead-Jones Act	12,000,000	§ 12,000,000	....	Farm population
Bankhead-Flannagan Act	‖ 8,330,000	....	8,330,000	" "
Additional extension work	555,000	555,000	....	Determined by Secretary of Agriculture
Alaska	23,950	¶ 20,000	3,950	Rural population
Puerto Rico	274,000	274,000	....	Specified by law
Total direct federal payments	$27,367,660	$14,329,000	$13,038,660	
Total from within the states	$31,006,696			
(State and College) ...	(17,174,963)			
(County)	(12,268,128)			
(Farmers' Organizations)	(1,563,605)			
GRAND TOTAL	$58,374,356			

* Federal Legislation, Regulations and Rulings Affecting Cooperative Extension Work in Agriculture and Home Economics (U.S.D.A. Misc. Publ. No. 285), revised by the Division of Business Administration, Extension Service, U.S. Department of Agriculture (1948).

† $10,000 to each state, Hawaii, and Puerto Rico.

‡ $20,000 to each state and Hawaii.

§ $20,000 to each state and Hawaii (balance on farm population basis).

‖ $500,000 for special needs as determined by the Secretary of Agriculture.

¶ $10,000 to Alaska (Act of Feb. 23, 1929); $10,000 to Alaska (Act of June 20, 1936).

of these ways of handling county funds for extension work more nearly completes the cooperative principle. It also provides a local, nonpolitical group of rural people, interested in extension work, to deal with county governing bodies in seeking funds to finance the work. This tends to leave the county extension agents free to carry on extension work without political implications and without the embarrassment of asking for funds for themselves. It also provides another opportunity for lay leadership to develop and function.

In some states county funds are turned over to the state extension service for administration. These states either pay all county costs from such funds, or make allotments to county sponsoring groups for administrative approval. In the report of the administrative workshop held at Madison, Wisconsin,[2] in October, 1946, it is stated: "The actual channel through which disbursement is made is not important so long as local responsibility for and authority over the funds is safeguarded. This may be done by participation of a proper local agency in such matters as making local budgets, employing the agents and approving local programs."

Use of Private Funds

Funds from farm organizations and other contributions of this character are handled by the local sponsoring group. These are considered to be a part of the local extension budget in the same manner as funds from tax origin. The use of funds from private sources in the development of extension work dates back to its origin under a grant from the General Education Board. Businessmen and industrialists have throughout the life of the service continued to express their interest and support in terms of financial contributions. The encouragement and acceptance of such funds is entirely proper when used in a broad educational program devoted to the total public interest. The administration of such funds should be under the same general safeguards that surround the administration of public money. These funds may be useful in accomplishing work for which no public money has been appropriated.

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[2] *Extension Administration, Report of Workshop, Extension Service Farm Foundation, Univ. of Wisconsin* (Madison, 1946).

Handling Funds

A simple statement of the source of funds for a county extension budget might be: funds appropriated by the county government and funds contributed by farm organizations or others for the support of county extension work. Both types of funds are handled by the proper local authority for the local administration of extension work under the guidance of the state director of extension. State directors issue detailed suggestions for county budget preparation and instructions for accounting procedures where necessary in counties.

Local people who are elected to responsible positions in sponsoring organizations, or who give volunteer service are entitled to know what, if any, legal liability they assume. There should be a clear understanding by all county extension agents as well as local officers of the insurance coverage necessary on automobiles and property used in county extension work. Inventories should be taken annually of supplies and equipment. Employee compensation and retirement provisions should be reviewed often enough to inform new officers and agents. All such matters, including annual audits, are generally covered by instructions from the state director of extension and should be thoroughly discussed with his field representatives when they visit the counties.

The process for obtaining funds may be described rather simply, if the variations which occur throughout the nation are disregarded for the moment. A county program is made and approved. A county budget to support this program is prepared and presented to the proper officials. These may be the county governing body or the executive body of a farm organization. The county budget becomes operative when approved by the responsible county group and by the state director of extension through his representatives. Each cooperating party pays funds according to agreement.

The state extension service prepares plans of work based on the county programs. A proposed budget is prepared to finance these plans. The budget and plans are submitted to the officials and governing bodies of the land-grant institution. When approved by them the budget is submitted to the state legislature through proper chan-

nels. Amounts thus appropriated form the funds from state legislative sources for cooperative extension work.

The state plans are submitted to the Secretary of Agriculture, through the federal director of extension, for approval. When the plans are approved, federal funds available to the state are released.

There are two plans for paying the salary of county extension agents. Some states pay all of the salary of all agents from federal and state funds. Others pay only a part of the agent's salary from federal and state funds and require the county sponsoring group to pay the balance of the salary from funds of county origin. In states following the first-mentioned plan, the amounts of agent salaries are established by the state extension director. In states following the second plan, county sponsoring groups generally establish the salary.

Although county funds and often private funds are mingled in the employment of agents who receive federal funds as part of their salary, it is held that the administrative direction resides with the state college or land-grant institutions.

When federal funds are used to pay part or all of an extension worker's salary, such a person becomes a cooperative employee representing both the state and the federal service. As a federal employee the worker may be given the penalty privilege (free use of mails) for official extension business. Such persons may also receive certain benefits of the federal Compensation Act in case of injury while on duty. Cooperative employees have been held to be eligible to the federal retirement system upon making the required payments.

Any state money offered as offset for federal funds must be used for the same purposes and is subject to the same limitations.

Accountability to the Public

Economy and efficiency in the use of funds has been a tradition of the service. This grew partly from the integrity of officials responsible for administration but also from the close interest of farm people who are accustomed to practicing economy and thrift in their own affairs. Budgets have been carefully prepared to enable the execution of the desired programs. At the county level auditing committees have been familiar with every expenditure. Extension

workers have felt a definite accountability to the public at close range. The necessity to justify and secure appropriations has kept the Service "on its toes" to show results and demonstrate efficiency.

The confidence of rural people is annually expressed by the appropriations and contributions that are provided locally to make the work more productive. This fact is not altered by fluctuations in the amounts contributed in hard times and good times. In addition, the contribution of thousands of hours of time in voluntary service, to say nothing of the gasoline and other expenses borne by local leaders, multiplies the efficacy of the amount the taxpayers put into the system. Volunteer workers are themselves taxpayers. Extension workers, both professional and volunteer, are keenly interested in the careful and productive expenditure of every dollar used in the service. As public servants they live in a goldfish bowl. In a democracy it is not long before the public communicates its impressions to its legislative representatives. This is democracy in action. We like it and fight for it. But it means accountability to the people in a very direct way which asserts itself every time a budget is submitted.

CHAPTER VI

Duties and Qualifications of Workers

EXTENSION WORK has passed the pioneer period. It has served as a source of aid and help through two great wars and one severe economic depression. It has developed leaders who have gone into every farm organization and many business concerns of the country. The older the system grows, the more clearly the functions, duties, and qualifications of its personnel are understood. As new workers enter the system it is essential that each understand what his job is and what will be expected of him. He must have access to the facts about the other fellow's job. This is sometimes called recognizing the area of responsibility. It helps him to hoe his own row and also to keep out of the other fellow's way. It is a part of being oriented in his work.

The matter of personal relations is handled in a later chapter—in this one we deal with what an extension worker must *be* and *do*. What a man does depends upon what he *is*.

Personal Characteristics

In studies of successful agents by Director H. C. Ramsower of Ohio and in personnel record cards kept by the Extension Services of various states, and again in the list of qualifications of extension workers drawn up at the Extension Administration Workshop in Wisconsin, 1946, certain personal characteristics are emphasized again and again. These are vision, ability to plan, initiative, resourcefulness, integrity, faith, courage, judgment, perseverance, tact, and power of expression. These qualities are described as essential to all

extension workers in all capacities. In addition, technical ability is important because without it there is no effective work. In an unpublished study, made in New York State, of the more successful agents, as rated by their supervisors, there was a definite correlation between those rated in the top quarter and those having high scholastic records in college. This was in spite of the fact that some had been out of college 15 years. There were also some glaring exceptions to this correlation—a fact that caused state leaders to think of technical ability, or scholarship ratings, as only one of several elements to be considered. Experience such as farm background, teaching, homemaking, salesmanship, and related government service, all have their values. Personal appearance must be considered along with health. For each job in extension various combinations of qualifications tend to give greater assurance of success.

Qualifications of Administrators (including Directors, State Leaders, and Supervisors)

A good administrator in extension is a teacher of the philosophy, policies, and methods of extension. He plans, directs, and supervises the work of others. He multiplies himself through others. As in administration generally, he is responsible for getting things done as well as for doing things himself. A man can serve well only as the work he is doing fits his nature and as the environment brings ease of mind.

The demand upon an executive is to know the attributes of individuals and to be aware of the characteristics of human nature. Every issue in administration comes back to this: Know the human organism and the manner of its behavior. The executive should be an expert in human nature—whether this knowledge is intuitive or acquired by conscious study. Qualifications of an extension administrator seem to be:

1. Successful experience in one or more, preferably several, of the fields of work which he is to administer.

2. Established position of leadership and confidence among those with whom he is to work.

3. Farm, or at least agricultural background.

4. Education of college grade.
5. High personal qualifications as follows:

(a) Integrity
(b) Fairness and sound judgment
(c) Health
(d) Sense of purpose or direction
(e) Technical mastery
(f) Decisiveness
(g) Faith
(h) Courage
(i) Initiative
(j) Perseverance
(k) Versatility
(l) Power of expression (in the written and the spoken word)
(m) Sense of humor
(n) Organization sensitivity

Duties of the State Extension Directors

The extension director is the administrator of the Extension Service in his state. His responsibility, therefore, involves all those things that will further the objectives of the Extension Service within his state. Obviously he must delegate to others most of these duties and responsibilities, reserving to himself those that are necessary for good administration. The following are his principal duties:

A. *Organization* [1]

The first duty of the director is to develop a plan of administrative organization. This should be as simple as possible and still be effective for getting the job done. It should conform to basic principles of good organization. From time to time it should be studied, tested for effectiveness, and revised to meet changing conditions.

B. *Personnel selection and management*

No other function of the administrator is more important than the wise selection of personnel. The impression which the public will have of the Extension Service in his state will depend largely upon the men and women he selects. The effectiveness of his organization in rendering service will be determined almost wholly by the competence of his associates. The extension director should not rely merely upon his own judgment in analyzing applicants. He

[1] See *Extension Administration, Report of Workshop, Extension Service Farm Foundation, Univ. of Wisconsin* (Madison, 1946).

should establish recruitment procedures that will broaden the field from which he may select. This might involve leadership in developing and providing for college courses that will aid in specifically training young men and women for extension work after graduation. It may involve a plan for encouraging outstanding boys and girls in 4-H Club work to prepare themselves for employment with extension. The job of selection will be facilitated, if the director prepares, with considerable care, a list of qualifications for each of the major types of employees used in his organization.

It is a duty of the extension director to make adequate plans for succession within his organization. If a staff member in an important position leaves the organization, even on short notice, there should be another qualified to take his place. Without planned succession there will not be continuity in administration and in program execution. This duty is a phase both of personnel selection and personnel management.

Equally as important as the selection of personnel is effective personnel management. This involves wisdom in the assignment to particular jobs, equalizing work load, in-service training, rates of pay, promotion, leave privileges, delegation of authority commensurate with responsibility, clear-cut instructions, provision for suitable working conditions and equipment, and a host of items that make for good relations and high morale.

C. *Policy determination*

Policy is a course of action pursued consistently over a period of time. Within a state extension organization, policies must be determined in connection with a wide variety of matters. Although it is the duty of the extension director to solicit and carefully consider the views of his associates, and perhaps others, before making policy decisions, the final decision is the responsibility of the director. This is one duty that cannot be delegated.

D. *Program determination*

The content of the extension program within a state is influenced by a great many factors. Since no state has the resources to permit

undertaking all activities that would enhance the broad extension objective, it is necessary to choose a few for emphasis. This is an important decision to make. As it pertains to the major extension activities, it is a decision for the director himself to make. The wise extension director will seek counsel before making his decision. This should come not only from his associates but from participants in the work. If the program of his organization is to be vital and to meet rural needs the director must make sure that the organization is close enough to the people on the land so that it accurately reflects their wants and needs. Since the needs of rural people are constantly changing, the director has a duty to keep the extension program dynamic.

E. *Supervision*

Supervision involves making sure that policies, administrative procedures, and programs of education are carried out. The extension director delegates this function in large part. He still has the duty of supervising those to whom he has delegated authority.

F. *Evaluation*

It is a duty of the extension director to evaluate his organization and its program continuously and objectively. This involves determining the effectiveness of the organization (where it is weak, why, and how it can be improved) and the value of the extension program to the public, that is, the extent to which its purposes or objectives are being attained. This duty will be most effectively discharged if the director, in addition to his own evaluating, will encourage each of his associates to participate in this process.

G. *Finance*

Arranging for funds to finance the extension program in his state is a duty of the director. This may involve arrangements with:

1. The land-grant college president and governing board.
2. The dean of agriculture (in some states).
3. The federal extension office.
4. The state legislature.

5. The county appropriating units.
6. The local contributing groups (in some states).

When funds are obtained the director must, after consultation with members of his staff, allocate these to each function and activity of the organization. He must also periodically determine the advisability of reallocating funds as circumstances change. Provision for an appropriate system of accounts and budget control is also necessary.

H. *Relationships*

The extension director should strive to maintain proper relationships between his organization and other organizations and agencies and with the citizens of his state. His unique position affords opportunity for him to be effective in coordinating the activities of those outside the Extension Service who work with farm people.

Those with whom the director must strive to maintain good relationships are:

1. His own associates.
2. The federal extension office.
3. The college or university president.
4. The deans of the colleges, the director of the Experiment Station, and other college staff members.
5. Agencies, both federal and state, that have agricultural programs.
6. General farm organizations.
7. The public.

Keeping people informed of the purposes, programs, operations, and accomplishments of the Cooperative Extension Service is essential. Although correspondence, reports, and publicity are devices of some value for doing this, there is no substitute for personal contacts. Interviews, conferences, and meetings must, therefore, receive much of the director's time.

I. *Reporting to officials and to the public*

The state director of extension is required by law to report through appropriate channels each year to the Governor of the State and to

the Secretary of Agriculture. This report describes the use made of funds and the general accomplishments of the Extension Service. It is good administrative procedure for the director to make informal reports more frequently to appropriate officials. Likewise it is his duty to the public, upon whom his organization depends for support, to keep it informed of his stewardship.

Summary of Duties

As administrator of the Extension Service in his state, the director has a vast number of duties. The majority of these duties he must delegate although he cannot avoid the final responsibility for them. His effectiveness as an administrator will be greatest if he reserves to himself only those duties that legally he cannot delegate or that must, of necessity, be performed by him personally. His aim should be so to free himself from detail that he has the maximum amount of time available to plan, to determine policy, to evaluate the organization and its program, and to take care of public relations. These are, in fact, his primary duties.

Duties of a Supervisor or State Leader

Knaus and Hearne [2] gave the following summary of the activities of extension supervisors:

1. Director of field operations—endeavoring to keep the extension organization functioning smoothly in his territory; seeing that local funds are available to assure the employment of an adequate staff and the necessary accessories to efficient operation; keeping vacancies filled; greasing the extension machine when friction develops; maintaining satisfactory relationships with the public and with other governmental and educational agencies.

2. Planner—drawing upon, organizing, and coordinating the resources of local people and of the state college and the United States Department of Agriculture in developing and carrying out a program for improving the home life and agriculture of his territory.

3. Teacher—training the extension agents in the best methods of

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[2] Karl Knaus and C. C. Hearne, *Extension Supervisors, What They Do and How They Do It*, U.S.D.A. Extension Service Circular No. 409 (1943).

working with people as programs are developed to improve local situations.

4. Appraiser—studying both work and worker; constantly evaluating the work to see that it fits the current as well as the long-time need, and just as constantly evaluating the worker to see if he or she is using the best means of making the work influence the greatest possible number of people.

5. Above all, he or she is a leader—teaching by example; stimulating county extension agents to attain a position of responsibility and leadership in agriculture and homemaking in their respective counties, with the result that the whole rural population has a greater satisfaction from living.

In recent years the director's job has become heavier and more complicated, and he has found it necessary to delegate more and more of his administrative functions to others on his staff. Increasingly he must depend upon the supervisors for handling administrative matters with the counties such as budget, coordination, balance of programs, and public relations of various kinds. This may result in further delegation of administrative duties to supervisors or in some cases the creation of a position to combine these activities in one person.

Qualifications of a Specialist

A. Background: It is preferable that each individual have a rural background, with some farm or homemaking experience.

B. Training:

1. Minimum requirement of Bachelor's degree from an institution of recognized standing.
2. Broad basic scientific training.
3. Major emphasis in field of specialty.
4. Graduate study usually helpful.

C. Experience:

1. Farm or homemaking experience desirable.
2. County extension experience desirable but not practicable for some types of specialists.

3. Experience in working with the public in a related field may substitute for previous extension experience.

D. Characteristics:

1. Effective teaching ability.
   a. Able to assist agents in organizing and developing programs.
   b. Able to use effectively applicable teaching techniques.
   c. Able to evaluate his own and agents' programs.
2. Ability to plan and cooperate with others.

   Must be able to analyze his field in relation to the whole field of agriculture and home economics, to prepare his plan of work and to be able successfully to correlate his work with that of other extension workers.
3. Vision and leadership.
4. Sympathetic attitude toward associates.
5. Clear and systematic thinking.
6. Effective speaking and writing.

   Should be able to interpret and present ideas through bulletins, reports and otherwise in a language understandable by and appealing to the public.
7. Tact.
8. Enthusiasm.

E. Philosophy: His work is a contribution to a general plan for the betterment of rural life and living. Community welfare should be his goal, not the promotion of his own work.

Duties of Subject-Matter Specialists [3]

In backing up the work of agents in counties the subject-matter specialist group, like the supervisory group, is concerned with the improvement of teaching. Specialists view the whole program and relate subject matter to all the phases of program making and execution. Five broad groups of functions are performed by subject-matter specialists, namely: planning functions, training functions, direct teaching, field studies to increase the effectiveness of the work in their respective subject-matter lines, and preparation of teaching materials.

[3] See *Functions of Extension Specialists*, Iowa State College, St. 383, 1952.

In order that the work of specialists may be coordinated to help solve problems involving one or more subject-matter fields, someone may serve as *leader of specialists*. Such a person bears the same relation to the specialists as supervisors of other groups in the service bear to the group they supervise. When there is more than one specialist in a subject-matter department, the head of the department or one of the specialists may be designated as *project leader*. His duties are largely planning and coordinating.

The following list of specific duties of specialists was prepared in part by summer-session extension classes:

1. Keeping state and county extension workers up-to-date with regard to the findings of science and their application to the solution of farm and home problems.

2. Serving as a bridge between subject-matter research departments and field extension workers; interpreting the results of research in terms of desirable farm and home practices.

3. Assembling and analyzing facts, clarifying problems in the subject-matter field, studying the status of his enterprise throughout the state and the nation.

4. Helping county agents to develop sound county and community programs in which subject matter is correlated to best serve the interests of the farm and home as a family unit.

5. Assisting agents in the effective use of teaching methods peculiarly adapted to the subject matter involved.

6. Backing up the county programs with suitable state-wide publicity, popular bulletins, form letters, motion pictures, film strips, slides, exhibit materials, and other teaching aids.

7. Making studies to determine successful and unsuccessful methods of organizing and conducting extension teaching in the particular subject-matter field.

8. Outlining measuring devices and procedures applicable to the subject-matter problems being attacked and assisting agents in their use.

9. Handling direct teaching of rural people within the county in such a manner as to strengthen the position of the county worker

and enable him better to meet subject-matter problems arising after the specialist's departure.

Qualifications of County Extension Workers

A. Background and experience:

1. It is desirable that the individual have a rural background.

2. Experience as a farm operator, homemaker, or a 4-H member is desirable.

3. Teaching experience is often helpful.

4. Experience in working with the public in a related field is helpful.

B. Training:

1. Minimum requirement should be a Bachelor's degree from an institution of recognized standing.

2. Special courses in extension work and related subjects are highly desirable.

3. High technical ability in a broad field.

C. Characteristics:

1. Teaching ability.
2. Ability to plan and cooperate with others.
3. Vision and leadership.
4. Sympathetic attitude toward associates.
5. Clear and systematic thinking.
6. Effective speaking and writing.
7. Tact and interest in people.
8. Enthusiasm, with reliability.
9. Faith and courage.
10. Integrity and dependability.

Duties of County Extension Workers

The county extension workers are by far the largest and the most important group in the Cooperative Extension Service. As the official representative of the state land-grant institution and the U.S. Department of Agriculture, living in the county in daily contact with farm men, women, boys, and girls in actual life situations, the

county extension agent is in a strategic position to study the problems and serve the needs and interests of the 2,000 or more farm families of the average county. The duties of the county extension agent are legion, and he or she must be constantly alert to the social and economic changes that vitally affect the lives of farm people. As extension is a voluntary form of education, the success of the county extension worker is largely determined by the degree of confidence that rural people come to have in the local representative of the Extension Service.

Figure 7. Living in daily contact with farm men, women, boys, and girls in actual life situations, the county extension agent is in a strategic position to study their problems and to suggest improved practices.

The various kinds of county extension workers perform similar functions. The following statement of duties outlined in part by extension classes are suggestive of the type of training that needs emphasis. It is a composite statement for all types of county workers.

1. Represents the state land-grant institution and the United States Department of Agriculture in the county in carrying on an educational program to improve rural life.

2. Studies the county, its people, and its agriculture and rural life to ascertain its problems and possibilities.

3. Develops or aids in maintaining the necessary organization of

rural people to help determine and carry out the county extension program.

4. Develops with the people of the county a long-time and current agricultural and rural life educational program based on the major problems and needs of individuals—adult and youth—and families.

5. Develops rural leadership.

6. Assists local organizations with their educational programs when their objectives coincide with the objectives of the county extension program.

7. Promotes friendly relationships and the coordination of activities of all agricultural and country-life groups within the county.

8. Maintains a public office where rural people and others may call, telephone, or write for information on all problems relating to agriculture and rural life.

9. Keeps informed regarding social and economic changes affecting the farms and homes of the county, and keeps up-to-date professionally through attendance at conferences, reading, participation in in-service training courses, and otherwise.

10. Develops interest and cooperation of various organizations and individuals in the solution of farm, home, and community problems.

11. Assists local leaders by supplying supplementary material, visiting farms and homes, providing helpful literature.

12. Arranges for help of specialists.

13. Provides information to individuals and groups other than those regularly organized.

14. Helps evaluate work done by obtaining and analyzing records and preparing statistical and narrative reports for county, state, and federal use.

15. Encourages the interest and cooperation of various organizations and of rural people in the development of boys and girls through club work.

16. Assists people in the communities in the organization of local 4-H Clubs, in the selection and training of local leaders, and in the development of club programs.

CHAPTER VII

Relationship with Government Agencies

THE BEST extension work is done when all agencies interested in rural life are enlisted in the extension program. The government agencies with which the Extension Service has relationships are many and varied. The employees of the Service are public servants but not civil service employees. Thus while policies of relationships are generally worked out with the knowledge, advice, and aid of sponsoring agencies, including college trustees, county officials, and local associations or committees, it is clear that the employees must in the last analysis operate within the framework of policies determined by responsible administrative offices of the Extension Service or by state or federal laws. The situation is complex, but this makes relationships even more important.

All Levels of Government Concerned

Government agencies with which extension deals are at all levels —federal, regional, state, district, county, and municipal. Federal agencies include the U.S. Department of Agriculture, with its numerous bureaus. Among other federal agencies are the Bureau of Reclamation, Grazing Service, Fish and Wildlife Service, Indian Service, Veterans' Administration, Employment Service, Public Health Service, and the Office of Education. Relationships with these and other agencies may be on a broad national basis or at state or county levels. The best example of the regional type of agency is the Tennessee Valley Authority. State agencies may be typified by state departments of agriculture. District agencies, such as the soil

conservation districts, may vary in size from a single county or even a part of a county up to several counties. County agencies may be typified by the county school system. Contacts with municipal agencies are relatively few, arising from such things as municipal regulations governing local milk supplies.

Kinds of Work

Governmental agencies with which extension has relations perform a wide variety of kinds of work, such as administration, research, education, regulation, and service. In the administrative field, state directors of extension and their assistants have to deal with the Extension Service of the Department of Agriculture, the boards of trustees and the higher administrative officers of their state colleges, and with county boards of supervisors, commissioners, trustees, or whatever they may be called.

In research, the principal agencies concerned are the state experiment stations and the research bureaus of the U.S. Department of Agriculture. In education, there are such agencies as the Federal Office of Education, with its broad supervision of vocational education, state departments of education, county superintendents of schools, and even local school boards. Regulation may also be at practically all levels. Service and action again may be at several levels, as in the case of the Farm Credit Administration, with its federal staff, the twelve districts, and the local associations.

Variations in Administrative Policy

Important factors that affect good relationships include, among others, wide variations in administrative policies in the agencies with which extension works. Some administrators want and seek the full cooperation of the Extension Service on terms that are mutually satisfactory; others feel that they have a job to do in their own way without regard to the other fellow, no matter how much he may be interested in the program or how vital his cooperation may be in its success.

Sometimes, there may be a wide gap between the administrative policies of persons directing a single operation. This was the case in

the early days of the TVA, when one of the directors held the view that the board had a Congressional mandate to remake the Tennessee Valley, and that it and it alone was to do the job. On the other hand, another director held that, at least so far as its agricultural activities were concerned, the TVA should work with existing agencies. Fortunately, a broad program of cooperation with the land-grant colleges and the U.S. Department of Agriculture was developed which the states most concerned feel closely approaches the ideal in interagency relations.

Cooperation may be prevented by legislation or otherwise. For instance, although Congress talks much about coordination of activities, it sometimes prevents mutually beneficial cooperation. Two cases in point illustrate this. About 1930, the Office of Indian Affairs proposed to join with the Office of Cooperative Extension Work in asking that funds be provided for the U.S. Department of Agriculture to do extension work with Indians on reservations, the workers to be made a part of the state Extension Service. The Congress refused to make the appropriation to the Department of Agriculture.

Later, a similar proposal came from the Bureau of Reclamation for a federal appropriation to be made to agriculture to do more intensive extension work on certain reclamation projects that were not going well. Again, Congress refused. In each instance, it provided funds for the Interior Department agency to do extension work independently.

The state colleges of agriculture maintain a high degree of autonomy in determining whether or not they will cooperate in federal agricultural programs, or, if they cooperate, how far they will go. Neither the executive committee nor the executive body of the Association of Land-Grant Colleges and Universities can make a pledge that is binding on the individual colleges. They may say, "Mr. Secretary of Agriculture, we will cooperate with you in carrying out national agricultural programs," but the association does not attempt to guarantee performance on the part of its constituent members. One college may say, "We want nothing to do with these propaganda programs; we are an educational institution," while the

college in an adjoining state may say, "Give us the money, and we will do the whole job for you in our state." In between, there may be as many variations in attitude as there are states affected by the program.

Principles Governing Relationships

Working relationships between the Cooperative Extension Service and other groups and agencies will be harmonious and effective when certain principles are adhered to by the participants on all sides. These are:

1. Full and mutual understanding of the objectives and organization of the programs, and unity of purpose of the administrative and operating personnel at all levels. Serving the public welfare should be the aim.

2. Acceptance by each participant in a cooperative arrangement of the responsibility for making the joint program workable and effective.

3. Constant appraisal of the objectives and programs of the organizations to see that they are following the pattern for which they were created.

4. Maintenance by each participant of a sincere attitude and a willingness to develop plans for cooperative action with other organizations without relinquishing his own responsibilities.

5. Adequate interpretation and reporting of activities to cooperating and sponsoring groups and to the general public.

6. Mutual acquaintance of personnel to promote understanding.

Administrative Relationships—Federal Agencies

The relationship of Cooperative Agricultural Extension Work with federal agencies is of long standing. A historic base for such relationship stems from the Morrill Act of 1862, which provided for the donation of public land to the state for the establishment of colleges for the benefit of agriculture and mechanic arts. The Hatch Act of 1887 further established cooperative relationships through grants-in-aid by the federal government to state agricultural colleges

for carrying on research in scientific agriculture. The Smith-Lever Act[1] of 1914 established a legal and fiscal basis for Cooperative Agricultural Extension Work. The title of the act cites that the purpose is to provide for Cooperative Agricultural Extension Work between the agricultural colleges of the several states and the United States Department of Agriculture. In the development of relations between the Cooperative Agricultural Extension Service and any governmental agency, it is essential that there be mutual understanding and acceptance on the part of both agencies of the purposes, organizational structure, authorities, and limitations of each. In the furtherance of good relationships between the Cooperative Agricultural Extension Service and federal governmental agencies, departments, or authorities, the following points should be emphasized to the cooperating agencies:

1. The Cooperative Extension Service is a county-state-federal agency, and as such its objectives and work are designed in the interest of and to promote the welfare of all the people, particularly rural people.

2. The Smith-Lever Act prescribes a cooperative or mutual partnership relation between the state agricultural college and the Secretary of Agriculture in the development of plans for carrying on Cooperative Agricultural Extension. This partnership technique extends to the county level by which county extension agents work with local people in the development of plans based upon their needs and interests.

3. State, county, college, or local authority, or individuals can contribute to the state's offset funds required by the Smith-Lever and subsequent acts for the maintenance of Cooperative Agricultural Extension Work.

4. The scope of Cooperative Agricultural Extension Work covers the entire rural field, including economic production, economic marketing, and the development of better home, community, and social conditions.

[1] See Chapters III and V for further details; for information on relationships in wartime and emergency functions see Chapter IX.

5. The work of the Extension Service is educational and as such its chief function is to help people help themselves through teaching, technical advice and leadership opportunities.

A casual glance at the list of agencies within the Department of Agriculture alone is sufficient evidence of the multiplicity of activities of the federal government in the agricultural field. A more careful study of the law under which each of these was created and the rules and regulations guiding them brings out the complexity of their operations and the problems in developing and maintaining a working relationship between one or more of them and the Cooperative Extension Service.

Whether in business or education all administrators recognize that relationships constitute either a problem or an opportunity in projecting programs. This relationship is especially important in extension because of its cooperative aspect. The memorandum of understanding, the budget, the project agreements, and the annual plans of work specifically set out how the land-grant college of each state and the Department of Agriculture shall function in relation to each other in carrying out extension programs in agriculture and home economics.

The Smith-Lever Act clearly defines extension work. Since its passage, however, there have been many other acts of Congress giving both resources and authority to the Department of Agriculture and other departments of the federal government for various kinds of service among farmers. Many of these services, whether defined or not, bear a close similarity to extension work and often overlap or duplicate it. How they have functioned in the field often depended upon the personalities selected to head them. Whenever such a situation throws an undue stress on two administrators at each level, it would seem that to ensure good relationships three things are necessary:

1. A re-examination and interpretation of the provisions of the various laws involved. This may eventually have to be done by the Congress, but much of it might be cleared up through careful study by the legal departments of government. A long-range appraisal may

suggest rearrangements backed by the knowledge and support of the people served.

2. When there are clear legal definitions of programs, there must be full and mutual understanding of the objectives and organization. Unity of purpose of the administrative and operating personnel is essential at all levels.

3. For one agency to bring its influence and prestige to the support of the work of another, it should first be informed and in agreement that such action on its part is in the public interest.

Administrative Relationships—State Agencies

There are certain units of government at the state level, such as departments of agriculture, state forest services, departments of education, boards of health, conservation commissions, college institutions not under the university plan, and state executive or administrative offices, which have lines of endeavor bordering on and entering into the field of the Extension Service. By law, implication, or invitation the Extension Service enters into cooperative programs with these units in the interest of public welfare. Some of these unit relationships are covered by memoranda of understandings or agreements; others are not. Some units operate in some of their aspects in seemingly parallel lines of endeavor with no intention of entering into a cooperative program with any agency. In these relationships, clashes arise from differences in dynamic personalities, misunderstandings in program function and operation, selfish publicity on program and program contribution, and apparent disregard of clauses in agreements and the like.

Principles of good relationship, when applied, should be made clear from the beginning and should be followed by periodic evaluations and appraisals. Administrative meetings of concerned agencies should be called frequently enough for evaluation and for correcting personnel clashes. The administrators should encourage good relations and harmonious accomplishment.

An agreed program of reporting and interpretations should be developed, giving all parties their just credit for the progress and accomplishments of the joint or cooperative endeavor.

Relationships with Research Agencies

In its relationships with governmental research agencies, the responsibilities of the Extension Service are twofold:

1. To make quickly available to rural people in usable form the results of research of the federal research bureaus and the state experiment stations that are applicable to and will benefit farmers and their families.

2. To bring to the attention of the research agencies new problems which farmers and their families are facing.

Here there should be, and usually is, a fine pattern of mutual cooperation between research and extension. Through the employment of federal and state subject-matter specialists, a medium of interchange between research and extension has been established. Subject-matter specialists should be responsible to the research agency for their subject matter but should be responsible to the extension director for their contacts with other extension workers and for their contacts with farm families. As the county agents are the official representatives of the Extension Service, state and federal, at the county level, contacts between the specialists and farm families should be through the county agents or at meetings arranged by them. In some states it is an established rule that insofar as possible the subject matter should be presented to farmers by the local extension personnel themselves.

Summary

In the final analysis, extension work will receive general acceptance if the program in the field is well planned, competently administered, and based on the needs of the people. A county extension staff with such a program, developed in cooperation with the rural people and other organizations, and carried forward with a sympathetic understanding of rural life, need have little concern over the inroads into the field of extension by other agencies.

REFERENCE

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CHAPTER VIII

Relationship with Organizations

THE EXTENSION SERVICE is a part of a land-grant college and of the U.S. Department of Agriculture. We have seen, in Chapter IV, how those sponsoring organizations are authorized and used in order that extension workers may reach and assist the largest number of people. It would be a slow process carrying on all work with individuals. In this chapter we are considering the relation of extension work with all the organizations concerned with rural welfare. These may be composed of farmers or city people or both. The development of leadership is also closely united with problems of relationships with organizations.

Farmers Need the Help of Organizations

The nature of the farmer's job as a producer and his environment have tended to make him an individualist. Even in these days of organization, each farmer tends to become highly specialized. The centralization of industry into great corporations requires farmers to deal with large organizations with which they are not qualified to cope as individuals. The recognition of this situation and the hope for economic advantage were two influences behind the great advance in the formation by farmers of cooperative organizations of all kinds in the 1920's.

It is in the public interest for farmers so to organize. Without strong farm organizations, public policy may become one-sided and actually injurious to this great basic industry. Without a reasonably prosperous agriculture, the general public suffers. Possible dangers

from misuse of organization among farmers can be readily controlled by legislation. Furthermore, farm organizations in general are in the hands of conservative leaders representing thousands of small landowners who are fundamentally both capitalists and laborers, and whose sympathies can never be carried away entirely by the popular appeals of either of these groups. This is inherent in the nature of farming as a business. Most farmers and their leaders understand that in the long run farm organizations must not function wholly in a class interest without regard to the public.

The county extension agent is recognized as a teacher of improved practices. Most county agents understand that there is no place for organization as such without a real purpose based upon economic, social, or other needs. Before county agents were known, there was considerable organization work done by farmers. Some early and noteworthy examples are the Grange in the Northeast and the West, and the Farmers' Union in the South and Southwest. In particular, the Grange has been a forum for discussion and has nurtured many farm leaders and other farm organizations. These early organizations often aimed at the correction of definite abuses. This early experience and county agent leadership since then has led to sounder and more permanent types of organization.

Public Relations Are Important

As the number and type of organizations affecting farmers increases, the Extension Service is in the same position as it is with regard to all improved practices. It teaches people the value of organized effort varied according to need—and the people decide which brand to use. This is advisable for three reasons: (1) many of these organizations implement the program of the Extension Service; (2) farmers, homemakers, boys, and girls are interested in all kinds of organizations and may be approached through them; (3) rural and city people alike must be acquainted with the purpose of cooperative extension work and the value of participation by rural people in this educational effort. Rural people must know how to organize themselves to solve many of their problems. Guides for organizing, information about results, and success and human-

interest stories should be continually prepared and publicized through all the means available.

The welfare of farm organizations is closely related to the Extension Service. Years ago a redheaded Irishman, with his temper flaring, was pounding the table and telling his county agent of a hot place he could visit. "I'll be damned if I'll pay a cent, let alone a hundred dollar assessment, to that crooked, blankety-blank Hay Co-op." The new county agent had never heard of that cooperative until that very blank moment. It was a case of an early, unsuccessful marketing venture. A former county agent had helped start it, so a county agent had to help untangle it. Cooperative marketing had lost face with farmers and cooperative extension had lost face along with it. Since then, with the lessons learned, many successful cooperatives have been established, and mutual benefit has resulted.

Since the actions of organizations are determined by their management, certain policies are necessary to guide the Extension Service in dealing with them. These are established partly by law and partly by experience. Before listing some of these policies it should be pointed out that the organizations that legally sponsor extension work in the counties (see Chapter IV) must act, in this respect, as public trustees. Cooperative extension workers, as public employees, are bound by certain regulations. Sponsoring organizations should respect these regulations. Organizations are free to act within the framework of their constitutional or legal charters. We are chiefly concerned here with the activities of the great family of cooperative extension workers and the necessity of each member of this family having a clear concept of his responsibility to the public.

Extension Workers Are Public Employees

The work of the cooperative extension employees, whether county agents, home demonstration agents, boys' and girls' club agents, or other cooperative extension workers, is educational. These extension workers are public teachers paid with money largely raised from all of the people by taxation. They are charged with giving instruction and practical demonstrations in agriculture and home economics. Their work covers the entire rural field, which includes economic production, economic

marketing, and the development of better home, community, and social conditions.

As they are public teachers it is not a part of the official duties of extension agents to perform for individual farmers or for organizations the actual operations of production, marketing, or the various activities necessary to the proper conduct of business or social organizations. They may not properly act as organizers for farmers' associations; conduct membership campaigns; solicit membership; edit organization publications; manage cooperative business enterprises; engage in commercial activities; act as financial or business agents or take part in any of the work of farmers' organizations, or of an individual farmer, which is outside of their duties as defined by the law and by the approved projects governing their work. They are expected, however, to make available to organizations such information as will be helpful to them and contribute to the success of their work. . . . In short, it is the business of the extension agent to cooperate with all agricultural organizations which desire to cooperate on approved projects. If more than one organization exists in a county, he must cooperate with all fairly and impartially in the educational work in which they are mutually interested.[1]

County agents are usually called upon to work with at least three types of organizations. Some of these, it will be noted, are organizations of farmers which the agent himself may have assisted in forming for the purpose of furthering the conduct of his educational work. Others may be organizations which have existed before the county agent system was established or have been formed entirely independently but with similar objectives.

Production Organizations

The first group may be called the production type. It consists of such organizations as dairy herd improvement associations, seed associations, poultry councils, artificial livestock breeding associations, potato spray rings, and water and irrigation districts. There are literally dozens of this type of organization which are primarily concerned with production. Naturally there are not definite or exclusive lines drawn between these types of organizations. Many of them

[1] *Federal Legislation, Regulations and Rulings Affecting Cooperative Extension Work*, U.S.D.A. Miscellaneous Publication No. 285 (1946).

may be operated in combination with buying and selling functions as well as with educational and promotional work.

These production organizations are extremely useful in extension work and are in fact good evidence that the practices taught by the

Figure 8. A farmer discussing records with the field man of the Dairy Herd Improvement Association—a supplementary organization to help dairymen carry out recommendations of the Extension Service.

Service are being carried out. For the ordinary farmer, what is done on his farm is in a large measure controlled by what such organizations offer him in service and supplies. If there is no way for him to get his milk tested for butterfat, he probably will not get it tested. If there is no artificial livestock breeding association available, he will continue with his old methods. County agents have a heavy share of the responsibility for training the farmer leadership in control of these organizations and for helping them plan and carry out a vital program that meets the needs of the people. In recent years the great number and increasing importance of the role of these organizations has required a large amount of time and energy of agricultural agents. To help such groups perform with maximum

benefit and discharge all the other individual and public responsibilities that are the local agent's is a task as challenging as any public servant would want. Doubtless new and additional devices and organized groups will be created as time goes on. The Service must meet this by finding more leaders, training leaders, giving them an opportunity to act, and teaching people the values of organized effort. More county extension workers, more aid from extension specialists, and more efficient use of time would also help.

Organizations like those just described will understand the Extension Service because they work so closely with it. It occasionally happens, however, that the private interests of specialized groups of farmers clash with the recommendations of the Extension Service. For example: (1) one set of livestock breeders may think the agent is prejudiced against them; (2) a group of farmers may have some seed for certification that does not meet the recommended standard, and they may feel obliged to set up their own standards and may become antagonistic. This danger of unsound relationships increases in the next group of organizations, which are involved in buying and selling.

Cooperatives and Commercial Groups

The second type of organizations includes cooperatives of all kinds—for buying and selling and for the handling of farm and home supplies and farm produce such as grain, milk, livestock, cotton, and lumber. Also in this category is a wide variety of commercial organizations, not only those for nurserymen, seedsmen, hatcherymen, and livestock breeders, but all the commercial companies supplying seeds, feeds, fertilizers, home refrigerators, sewing machines, freezers, farm machinery, and other farm and home supplies. Sometimes these take the form of trade organizations such as those for retail feed merchants, apple shippers, canners, etc. Good relationships with this group of organizations involve a clear interpretation of the educational function of the Extension Service. Commercial activities may be carried on either cooperatively or for the benefit of companies or private individuals.

Good working relations with farmer-owned and farmer-controlled

marketing organizations are desirable from the standpoint of the Extension Service, because such cooperatives properly organized and managed may perform the following functions:

1. Provide a way to meet difficulties and situations which are hindering profitable farming, but which cannot be handled by publicly supported educational institutions or by the individual working alone.

2. Establish local organizations which may be federated into regional organizations to solve marketing and distribution problems beyond the capacity of the individual to handle.

3. Help to increase the profits from farming and thus to put farming on a better business basis.

4. Have the effect of improving rural economic, home and social conditions.

To help people understand and use to their advantage this tool for group action the county agent may assist in arranging conferences with county or regional officers; in working out county-wide educational plans; in advising as to the local leadership, conditions, and situations; and in calling meetings to discuss the values and purposes of organization. Things which the county agent should never do and for which the organization should itself assume complete responsibility are well listed by Burritt as follows:

(1) The receiving and paying out of all organization funds.

(2) The signing, witnessing and safe keeping of all agreements, etc., having to do with the sale of commodities.

(3) The actual organization of local or county branches, soliciting of members and all business arrangements connected therewith.

(4) The enforcement of contracts with dealers, and the adjustment of all disputes and complaints. In these matters the cooperative must make its own decisions.

(5) Assignments and instruction of all its own cooperative leaders or organizers.

(6) Agreements on the prices of commodities and arrangements for caring for surplus.[2]

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[2] M. C. Burritt, *The County Agent and the Farm Bureau* (New York: Harcourt, Brace and Co., 1922, out of print), p. 87.

While it is well to remember that farmers' cooperatives are essentially commercial, it is important to point out that their objectives are unquestionably in the interest of their patrons and generally sure to effectuate the practical goals of extension work as applied to the farm and home. *Extension agents are expected to give information on cooperative enterprises* and are within their field when they give information on methods of organizing to reach the desired objectives. Cooperative buying organizations have every reason to handle those supplies which conform to the recommendations of the Extension Service. Many private commercial companies do this also, but they may choose to do otherwise. Cooperatives are inclined to have a progressive membership service which is educational and closely related to the teaching of extension. Much good may be accomplished in the public interest through cooperative educational work in better packing, grading, and marketing. The function of the extension agent is to assemble and to present the facts to farmers so that they may make their own decisions as to when and how to organize, when and how to buy or sell on their own responsibility. This is the principle of self-help in operation. It strengthens the ability of rural people to solve their own problems and is sound public policy.

The fact that extension may recommend cooperative enterprise does not mean that it condemns other forms of private enterprise. On the contrary, farming is a private, commercial enterprise itself. It utilizes the profit motive. The great commercial companies that have grown up in the United States by producing and selling tires, tools, farm machinery, electric power, and general merchandise have made contributions to farm prosperity in many ways. They have many problems and aims in common with the industry of agriculture. They are large taxpayers and have a growing understanding of the mutual dependence of industry and agriculture each to the other. Some of them, with a statesmanlike view toward education, contribute to scholarships and fellowships in our colleges. Others provide special services, films, demonstrations, or training without objectionable commercial propaganda so that educational institutions, including the Extension Service, may properly participate. Insofar

as these contribute to the planned program of extension, they help get on with the job and promote good feeling.

Whatever relationship an extension agent may have with one organization, he should be prepared to receive requests from others for the same cooperation.

Commercial interests properly recognize extension workers as leaders in their field. Such agencies may seek opportunities to cooperate and present their views to farmers in a message either written or oral. It is a good practice for an agent to refer all such requests to his sponsoring organization of farmers for their final decision after considering the agent's recommendations. This is good organizational and teaching procedure. Commercial companies may offer prizes for boys' and girls' work, door prizes for farmers' meetings, and other valuable and generous contributions. So long as these are offered freely without any strings attached there may be a place to use them. There is always the danger that difficulty and hard feelings may arise from the inequalities in value that recipients place upon prizes.

Materials or farm supplies obtained from commercial concerns for trial should be handled with care and no commitment made by the Service with respect to results obtained, since it is the policy of the Service to base its teachings upon its own research. At the same time the fine work of the research divisions of many commercial companies is deserving of credit. In no case should an agent be party to the distribution of any materials or equipment, even if free, if its use is contrary to the recommendations made as a result of research by government experiment stations.

General Educational and Service Organizations

In the third category are placed, for convenience, all other organizations. This includes educational, service, social, promotional, and many other types. Examples are the rural church, Grange, community councils, Parent Teachers Associations, all service clubs, chambers of commerce, planning boards, medical associations, improvement districts, agricultural societies, fairs, women's clubs, Scouts, Campfire Girls, historical societies, taxpayers associations,

and conservation and sportsmen's clubs. Through the years there has developed a wide variety of projects of particular interest to each of these groups. Not all of them are in full swing at any one place. As times change, conditions bring about new or renewed interest. The hobbies and interests of individuals lead them to take more active leadership in various fields. As leadership becomes available, stronger and more effective programs are set in motion. These offer opportunities to make friends and relate the work of the Extension Service to all other programs and action within the area.

The basic policy to be observed in such relations is a proper division of labor. The Extension Service aids the community to develop a comprehensive and well-balanced program. The execution of the programs must utilize fully all the various groups, persons, and resources best qualified to carry out its different parts. The Extension Service is not equipped to give every service required. Furthermore, the local schools, churches, granges, and other groups have particular functions which they alone can perform. These functions must be aided and strengthened by coordination and mutual confidence. In general, at the community level, the people who live together can get along together. Sometimes at higher levels of organization, officials get impersonal and tend to grasp for credit or power. Then jealousies develop. Such human weakness must be expected at times. Patience combined with tact, fairness, and determination to get on with the job without friction will usually prevail. In addition, the extension worker must stick to his educational job, which is his legal and undisputed right.

Another important policy in relationships is to be broad-minded about developing leaders. It is a good thing for all concerned when leaders who have been developed in extension find positions of responsibility in other organizations. With their knowledge of and background in extension work such people may bring to their new associates an inclination to work cooperatively with the Extension Service. Moreover, one important objective of the Extension Service is to *develop* leaders. A county agent may have to begin all over again developing new leaders when his committeemen have drifted into another group, but he should be happy when, for example, one

of the committeemen whom he has helped develop has come into a position of influence that may have a bearing on the support of extension work in the county. The Extension Service itself is, of course, not the only way by which leaders come to find their places. For years the granges and the rural churches have furnished a place for leadership development, and many of these persons have come over into extension work, ready-made to serve the community and state.

The golden rule is a good guide to pleasant public relations. In recent years increasing numbers of conferences between extension employees and representatives of various commercial organizations have served to improve relationships. Joint committees prepare the programs designed to bring about better understanding and appreciation, on the part of both groups, of the background, history, policies, and programs of each. Such conferences have been held at state and regional levels with feed dealers, canners, veterinary medical associations, and cooperatives of all kinds. Increased efficiency generally follows such a policy.[3]

Controversial Matters

Farm people, like the rest of the world, are usually involved in some sort of discussions of community or general interest that gradually take on the aspect of a controversy. Sometimes it is the school system, or a marketing plan, a price problem or a tax problem. When these discussions get to the point where resolutions are proposed for the support of various organizations, or where an organization is to be formed, a sharp controversy may develop during which people take sides and become committed to one way or the other. Occasionally two organizations appear to be in sharp controversy over an issue. Continual recurrence of farm controversy of one kind or another through the years has subjected the Extension Service to the possibility of two dangerous attitudes—on the one hand, a desire to jump into a controversy that is of vital importance to farmers in general, showing a red-blooded attitude and determination to fight

[3] For lists of specific things to do in working with other organizations see Chapters X–XVII.

the thing through on the basis of merit; on the other hand, a desire to avoid all controversy and follow a wishy-washy policy of avoiding unpleasant matters, even though they may be of vital concern to farmers. Neither of these courses of action is wise from the standpoint of good public relations. The first attitude, if long pursued, would dissipate energy in combat; the other would gradually emasculate the Service.

Some county extension agents have had the ability to change controversies into educational opportunities. Others have been unable to do more than stand by while the storm raged, to say nothing of being drawn in for a "good wetting."

County Agent Dan tells about the time a dairy cooperative was fighting for its life in his territory. "There were poolers and non-poolers among the farmers. Feeling ran high," Dan said. "I was trying to arrange a joint meeting of all milk producers with a neutral speaker to discuss the economic facts. One of my strong extension farmer-cooperators shouted, 'Who in hell are you with, the dairy farmers or the S—— F—— Dairy Company?'" Fortunately Dan managed to keep cool enough to say that the only way to get anyone to change his mind was to bring in new facts under conditions that provoke thought. His closing remark was, "You never want to lose your temper in a controversy with a farmer. It's like bawling out your wife. There's no satisfaction in it, and it usually results in strained relations for a time."

The Extension Service is not called upon to take a stand for or against any particular plan or method under controversy, but it is expected to stand on the facts. Get the facts on both sides and make them known. Let the farm folks make their own decisions. Avoid a public brawl in the newspapers. Arrange for public hearings and offer facilities for open discussions that promote better feeling. If an agent has kept rural people well informed and has their confidence, their action will usually be fair and workable.[4]

[4] Other suggestions may be found in *Activities of Department Officers and Employees with Relation to General Farm Organizations*, U.S.D.A. Secretaries' Memorandum No. 893 (March 21, 1941).

CHAPTER IX

Emergency and Wartime Functions

DROUTHS, floods, war, and other disasters multiply the problems of farm people rapidly and bring heavy demands on the Extension Service. Many of these have been well met while others are of a nature which the Service is neither able nor authorized to meet. When rural people turn with confidence to the Extension Service in their hour of need, long-range considerations and regular programs are laid aside to meet the most pressing needs. There is much helpful information and direction which the Extension Service can give in these emergencies. The policy is well expressed in a statement quoted from U.S. Department of Agriculture Memorandum No. 892 (March, 1941), as follows:

Policy in Meeting Emergencies

Most of the programs administered by the Department of Agriculture are designed to help farmers generally—to help them earn a better income, conserve their land resources, control insect pests, plant and animal diseases, and to aid them in various other ways. In addition, the Congress has provided special programs for the benefit of individual farmers who have been the victims of drouth, floods, soil erosion, and other natural hazards of farming. Among the special aids to this group are rehabilitation loans and grants. (Special services or Administrations have been created by the Federal government from time to time for this purpose.)

When drouth or other emergencies strike, the number of persons needing these special aids increases, and the Department expands these programs, within the limits of its available funds, to take care of the greater number of distressed families.

Obviously, neither the Department of Agriculture nor any other Federal agency can assume the full burden of meeting local emergency situations. Although prepared to do its part, the Department cannot extend special aids to persons who are able, even at some sacrifice, to weather the storm on their own resources. In short, the Department cannot be expected to make good all losses suffered by farmers because of some local disaster and thus assume all of the risks of agriculture.

Of course, the Department can and does modify its programs when the occasion demands. But it cannot depart from the authorizations granted by the Congress. For example, it cannot extend the protection of crop insurance to corn or cotton when the legislative authorization limits the insurance to wheat. It cannot lend feed stored in the Ever-Normal Granary when such a procedure is inconsistent with the basic legislation and would defeat the purposes of the Act.

Field representatives of the Department know the limits of the authorities for the programs they administer. They are expected to use these authorities to the full limit in meeting emergencies as they occur.

Much of the legislation authorizing national farm programs is designed to help agriculture get on a more stable basis, to adapt the use of the land to the long-time needs of the people and the dictates of climate. As these adjustments are achieved, as for example through programs that change a hazardous cash crop area into a grass-livestock economy, or shift a single crop area to a diversified type of agriculture, emergency aids should be required much less frequently.

Procedures in Emergencies

When a disaster or emergency occurs, the Extension Service may well assume the leadership in calling the representatives of the various agencies, both public and private, together on state and county levels, depending on the extent and area affected, to plan constructively. The following procedure is suggested for county workers:

1. Make a quick reconnaissance of the area, number of families affected, available resources, and facilities.

2. Inform farmers of available resources and facilities.

3. Report full details of the emergency to the director of extension.

4. Arrange for coordinated action by all interested groups.

5. Follow progress in meeting the emergency. Make a summary

of the kind and extent of damage to rural people and what is being done about it. Put this in the hands of the director of extension and other agencies concerned and responsible for help.

The American Red Cross has had long experience in disaster relief and is able and ready to help in rural areas. It does appreciate the assistance of farm organizations and governmental agencies, such as the Extension Service, in appraising the damage and following the Red Cross case work. Local health officers, township officials, police, and firemen are usually ready to help with pumps, blankets, chemicals, and services.

Figure 9. Backwater from the Chemung River, New York, standing in a cultivated field one week after the flood. High-water mark is at the tops of windows of stable where more than twenty cows were drowned.

When the area affected covers more than one county the director of extension may wish to confer with the Governor of the state on the quickest and best method of procedure. In some states the chief executive may designate the director or the Extension Service as the coordinating agent. Speed is the important element of action, but good relationships should be maintained by avoiding duplication of effort and assumption of responsibility that belongs to others. When officials or agencies that naturally would be expected to take

action have failed to do so, there is occasional justification for others to step in and do the particular thing needed. Even in such cases it is best to leave the way open for the proper agency to take over easily.

The wisdom of frequent conferences of the representatives of the various agencies has been shown by experience. Conditions may change rapidly. First reports may have been inaccurate. New interest locally may have been developed by calls from outside or from higher officials. When everyone starts to work there must be an agreement as to the division of labor. No one group or organization should try to get all the credit or play to the grandstand.

Safety of Persons. First consideration, of course, should be given to human safety and health, and alleviation of suffering. Any or all of the above-mentioned officials may be called upon. The Red Cross has local authority to provide for food, shelter, clothing, and medical care to meet strictly emergency needs, without waiting for action by state or national headquarters.

Safety of Livestock. Second consideration will usually be given to preservation, safety, and care of livestock.

Public Services and Facilities. It is most important that telephones, power lines and roads be made usable at the earliest possible moment. Telephone and power companies generally are among the first to get on the job to repair their lines. Highway officials, with the help of the sheriff and town officials, are usually quick to open roads and provide temporary bridges.

Farms and Homes. Then come the problems of restoring farm buildings and machinery, clearing debris from farmsteads and homes, restoring fences, cleaning cellars and furniture, and putting fields back into production. Quick action on these things is important to prevent further deterioration and to uphold morale of afflicted families. Various agencies can help with these jobs of restoration.

In case of disaster an individual is primarily responsible for his own survival and recovery from damages. But he is not alone in this situation. The public has a responsibility for those things beyond the ability of individuals to handle. In accepting the aid of public institutions the farmer should not consider that he is accepting charity.

He is accepting aid from organizations and institutions to which most people contribute through many years in order that such aid may be available when catastrophes occur far in excess of the ordinary and expected hazards of business. There will always be those victims of disaster who expect the government to do everything for them and completely reimburse them for losses. Then there will be those sturdy folks who expect little or no help or are too proud or too busy to ask for help. The big job for the helpers usually lies somewhere between these extremes. It requires adequate information, good organization, prompt action, and a spirit of cooperation.

What the Extension Service Can Do

It can be prepared. Certain rivers overflow their banks periodically; for such situations plans can be made well in advance. It is advisable that the permanent files kept in each county extension office contain a few pertinent facts useful in all kinds of emergencies, however. These may include:

1. A good map or maps, showing roads, streams, topography, soil types, land classes, etc.
2. Lists of town and county officers (with telephone numbers), especially the sheriff, coroner, superintendent of highways, township officials, and local police.
3. Location and telephone number of local headquarters of the State Police.
4. Local headquarters of the Red Cross Disaster Chairman.
5. Address and telephone of County Health Organization, nurses, and hospitals.
6. Copy of Memorandum No. 892 (U.S.D.A., March 15, 1941).
7. Reports of work done in previous disasters in the county.
8. Letters and instruction from the director of extension.

The Extension Service can be prepared to furnish accurate information concerned with subject matter in agriculture and home economics. Examples of information the county agricultural agent may give:

1. Where to get supplies of all kinds.

2. What to do and what not to do with damaged grain, hay, motors, crops, and land.

3. Varieties and types of emergency hay and feed crops to plant.

4. Where credit or financial aid is available and how to apply for it.

5. How to clean and disinfect farm buildings.

6. Ways and means for salvaging injured animals or damaged materials.

Figure 10. Furniture, rugs, and linoleum drying in the yard during house cleaning one week after a flood.

7. In case of widespread drouth, the whole extension program should be revised immediately; the agent should get facts as to the seriousness of the situation, and help to set in motion organizations for getting feed, seed, and money into the areas, and livestock out of it, for developing emergency watering places, and for undertaking a broad program of relief commensurate with the magnitude of the problem.

Examples of work the home demonstration agent may do:

1. Furnish information on general cleaning following damage from dust, water, smoke, or flood sediment.

2. Distribute mimeographed instructions [1] with information on such subjects as:

a. How to clean rugs and upholstered furniture.
b. How to repair floors and doors soaked in flood water.
c. How to remove mildew and mud stains from clothes.
d. How to get rid of unpleasant odors.
e. How to chlorinate water.
f. How to get rid of flies and mosquitoes.

3. Give series of radio talks on practical helps.

4. Set up system of visits by local leaders to see that help gets to those who need it most.

5. In case of drouth, change the food and family programs to meet the lack of local-grown vegetables and fruits, the lack of income due to crop failures, and the need for canning of meat; give information on various problems of sanitation that arise when water is scarce.

Many other ways of bringing help to disaster-stricken people will develop on the spot when conditions are known. The Extension Service has made a good record in such emergencies and will always have an important part to play in them.

Extension Service in World War I

Three years after the passage of the Smith-Lever Act the Extension Service was put to a severe test by the demands of a World War. A glimpse of the feverish haste and rapid expansion which took place is expressed in the words of A. C. True.[2] As usual, responsibility was placed on an organization which was already in the field and had a trained staff which enjoyed the respect of the rural people.

> As the war in Europe progressed and millions of men were taken away from productive labor, the demand for American food products increased greatly. This was particularly true of wheat, which is especially important from a military point of view. . . .

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[1] Such as "First Aid for Flooded Homes," mimeographed leaflet, College of Home Economics, Cornell University.

[2] *A History of Agricultural Extension Work in the United States from 1785 to 1923*, U.S.D.A. Miscellaneous Publication No. 15 (October, 1928).

Farmers were therefore being urged to increase production of food and feeds, and were making a tremendous effort to comply with the demand. There was also a great demand for cotton for war purposes. Agricultural conditions everywhere brought increased burdens on the extension forces throughout the country, and there was a general recognition that these forces must be expanded in order that they might give greater aid to every branch of agriculture and to food production and conservation in particular.

To the great quantities of foodstuffs consumed by the non-producing armies of the world were added those cargoes sunk at sea. . . .

Federal and State Councils of Defense and other public and private agencies engaged in war work often in cooperation with the extension forces. . . .

Meanwhile the cooperative agricultural extension forces in the several states were passing through a period of uncertainty and confusion after the declaration of war. The call for troops and for men to engage in various forms of war service led a considerable number of extension workers to enlist or otherwise place themselves at the disposition of the Government. It was increasingly difficult to fill the places thus vacated with well-trained men. . . .

The feverish haste to create state and local organizations to deal with war problems brought into them many inexperienced persons largely ignorant of the extension organization and its work. Some persons in these war organizations planned and attempted work in the extension field without the spirit or desire for cooperation with the existing permanent organization.

In the midst of the unusual conditions of agriculture and country life brought about by the World War and the operations of the new federal, state, and local organizations temporarily performing work bearing on agriculture and home affairs, the cooperative agricultural extension service entered on a somewhat narrower but greatly increased work which involved many close and often delicate contacts with both public and private agencies engaged in war work. In its federal relations, the extension service pursued its regular activities, directing the production and distribution of crops and livestock and the use of agricultural products in the home, aided the Treasury Department in its Liberty-loan campaigns, cooperated with the Labor Department in the war organization of labor on the farms and elsewhere, and cooperated with the federal and state councils of defense. . . .

Extension Service in World War II

Again in the recent war the Extension Service carried heavy nationwide responsibilities. When the conflagration broke out in Europe in 1939, agricultural leaders and farm organizations in the United States were engaged in developing policies of land use, promoting soil and water conservation, and adjusting programs to many new technical changes and mechanical improvements. Our farm journals were full of stories about rural electrification, crop insurance, marketing problems, farm tenancy, and farm labor problems.

More than a year before this country actually declared war, the Extension Service began to prepare to assume wartime responsibilities. In July, 1940, a State Agricultural Defense Committee was organized in New York State. When war came, the machinery for maximum food production was already in operation. This early preparation was the result of foresight and energetic administration. Drastic changes were made in programs; large gatherings involving extensive use of automobiles and railroads were canceled.

The spring after the attack on Pearl Harbor brought acreage goals to increase food production not only as a defense measure but to help our allies. All the weight of influence of the Extension Service and related organizations was placed on food conservation and better nutrition. The slogan "Make America strong by making Americans stronger" spread across the country. Emphasis was put on the vitamin-bearing foods, fats and proteins, such as milk, pork, dried beans, tomatoes, greens, and eggs. Improved hot lunches were served in schools and in factories engaged in war work.

Home demonstration agents put the full weight of their experience and teaching skill into the national programs of conservation and nutrition. Boys and girls enrolled in 4-H Clubs which resulted in thousands of war gardens. Farmers worked longer hours, with a shortage of materials, on more acres and with less help. Labor-saving devices and practices were promoted. A new farm-labor program was established by Congress, and responsibility for it was given to the Extension Service. This resulted in placing more than 3,000,000 workers on farms.

Farm machinery clinics helped keep the wheels rolling on the land. Rural fire prevention helped to stop waste. Thousands of neighborhood groups engaged in discussions which helped build up morale and understanding of national needs in wartime.

State and County Defense Councils were given every possible assistance by the Extension Service. The U.S.D.A. War Boards provided a way for all employees of that Department to coordinate their efforts.

With these adjustments in its program and organization and with the help of thousands of neighborhood leaders and minutemen, the Extension Service was able to fulfill its purpose as an educational agency. Extension employees also helped the government with rationing, priority in supplies, draft deferment, campaigns to save fat and metal scrap, and drives to sell war bonds. The ranks of employed extension workers swelled to about 12,000 in the United States, while more than 1,000 former agents were in the armed forces.

Major Agricultural Emergencies

One of the functions of the Extension Service is to help people recognize and solve problems. Some of these problems can be solved by individual effort, some require group action.

Major agricultural emergencies, such as the world-wide depression which occurred between the two World Wars, require group action which may be expressed in legislation providing for governmental agencies to expedite public effort. The Federal Farm Board, the Agricultural Adjustment Administration, the Rural Electrification Administration, and the Farm Credit Administration are examples of efforts through legislation to cope with rural problems requiring governmental aid and group action. Thus the resources of the nation were used to assist individuals and cooperating groups of farmers. The Extension Service, however, had been, since its early years, helping people recognize and discuss problems for which legislation of this type was intended.

Another function of the Extension Service is to help people understand how to use available resources. Naturally, when national group action like that described above was possible, the Extension Service,

having established itself as the major educational agency for out-of-school rural adults and youth, was called upon to assist rural people in using the national resources made available through such legislation. It gave the facts to farmers about normal and subnormal credit facilities, about soil erosion control, and agricultural conservation payments. It helped farmers and their families to get and use electricity. It explained the organizational processes needed to take advantage of the provisions in a legislative enactment.

This educational work has helped farmers understand emergencies and has brought to the foreground long-standing difficulties. Emergency situations crystallized a popular demand to do something about these long-term farm problems.

In 1933 few people realized that the "farm problem" was only one aspect of the effect of a drop in the general price level. During the war our efforts at food production had had the united support of all farmers. During the depression sharp controversies broke out between regions and groups as to what was best to do. Whether these cycles were new manifestations of old problems or were emergencies is an academic question. Through it all, when new agencies were increasing in number, the farmer continued to come to the county extension agent for advice. He needed help in filling out a form, deciding what the instructions meant, or how to comply with some regulations. He knew the county agent, and he had confidence in him.

Whether in war or in peace, the county agricultural agents and county home demonstration agents did not meet these great emergencies alone. They were working with thousands of rural men and women who shared the responsibility of determining their actions. Together these leaders and workers are facing the newer social trends and postwar economic problems with long-range policies arrived at by careful study of all the facts. Such thoughtful action will have a beneficial effect on national agricultural policy. This it may be hoped will some day reduce the shock of major agricultural emergencies, whether due to war or natural causes.

PART III

The Extension Program

Since the fundamental objective of extension work is the development of people, its philosophy stresses the basic importance of the individual in the progress of a nation.

The extension program may include a half-dozen general objectives for life but must list specific working objectives necessary for effective teaching.

Activities are directed toward fruitful ends by a system of gathering and analyzing facts and studying the problems and needs of the people.

The intricate or complicated findings of research are prepared by specialists for the use of the farmer, the homemaker, or the 4-H Club member. The county extension agent is the key worker in this situation.

Development of leadership is both a means and an end in program building.

CHAPTER X

Objectives and Philosophy

WHAT ARE OBJECTIVES? Objectives are expressions of the ends toward which our efforts are directed. To many a soldier in the last war "the objective" has a very definite meaning. He knows that a great deal of thought and planning has to be put into efforts to reach the objective; that the success of a particular movement is judged in terms of whether or not the objective was reached; that success in reaching one objective affects other tasks—these in turn have their accumulated effect upon the outcome of the war. He knows that each individual soldier has his own explanation and ideas about the objective according to his information, interests, and responsibilities.

In athletics we admire the man who "has his eye on the ball." First the goal is made, then the game is won, and at the season's close with a series of victories the pennant is cinched for the league. And so in extension work we have our immediate, specific goals, and our short-time and long-time goals. Above these are the over-all objectives, the attainment of which determines our general success or failure. The study of the degree of success we get in terms of our original objectives is called extension evaluation. This subject will be treated later. For the present we are concerned with establishing sound objectives.

Some educators use objectives, aims, and purposes synonymously. Paul Leagans [1] says:

> In reality it is not very important that we distinguish between them so long as we get an understanding of what is meant by the terms. It is

[1] *Extension Evaluation—Extension Objectives,* U.S.D.A. Extension Service, Outline of Summer School Course, Colorado (1946).

generally agreed that objective means "a direction of movement," for example, which direction do you wish to go in a given county with respect to the dairy enterprise—toward greater numbers of dairy cattle, larger herds, fewer dairy cattle, better quality of cattle, or some other possible direction?

F. B. Morris [2] speaks of aims as being a very generalized and broad statement of directions which life on the farm should be taking with respect to given activities. For example, improvement of the farmer's economic welfare may be thought of as an aim. This may have more specific objectives such as better feeding practices, larger size of business, balance of enterprise, improvement of soil fertility, more milk per cow, etc.

Again Leagans says:

If there is to be progress and not mere "evolution" in the development of people, the objectives of extension must be clearly and periodically determined in view of progress and changed conditions.

It should be kept in mind that not all people need or desire to go in the same direction or equal distances. Directions have varying degrees of importance to different people. In extension we must be prepared to offer opportunity for people to move in various directions. This is what is really meant by the term "balanced program in a county."

A good objective in extension is one that will provide possible direction for large numbers of people to move some distance. Extension must help people define the directions in which they want and need to go, then provide assistance to them in traveling in those directions. This is really the essence of extension work.

Some extension workers like to make a distinction between the meaning of objectives and goals. If objectives are defined as directions of movement then a goal may be defined as the distance in any given direction one expects to go during a given period of time. For example, an objective in a county extension program may be to raise the average corn yield from 35 to 50 bushels per acre. The goal then for the current year may be to raise the corn yield 5 bushels per acre.

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[2] *Planning County Agricultural Extension Programs*, U.S.D.A. Extension Service Circular No. 260 (1937).

Levels of Objectives

Probably the most desirable practice would be to use only the word objectives and follow the concept that there are several levels.[3] Three levels of educational objectives may be recognized:

1. Fundamental, all-inclusive objectives of society. *Examples:* the good life; better citizenship; democracy; the development of the individual.

2. The general but more definite social objectives. *Example:* helping rural people to have better home living.

3. Working objectives in a program. These may be stated in two ways. One way is from the teacher's standpoint; for example, influencing farmers to adopt strip cropping in Tompkins County. Another way is from the standpoint of the people; for example, making enough money to send children to college, finding out how to remove a stain, to adjust a plow, to increase fall milk production, or to get electricity on the farm.

A study of these levels is very enlightening. The type suggested in the first group is found in legislation and in charters of organizations. We accept these as almost axiomatic in our lives. In the second are the objectives you want to mention when you explain the Extension Service, or when you are generalizing on its purposes. Quotations from pioneers and leaders are generally at this level. The next level represents the *working objectives.* It is important to harmonize what rural people feel they need and what professional extension workers think they ought to have. In an ideal situation there would be perfect agreement between these two. In practice it is not safe to let either group dominate the setting of objectives. What people want may not be what they need most. What professional people think people need may not be what they want.

Experienced extension workers know that the most successful

[3] This concept of levels of objectives originated with Dr. Merrit M. Thompson, School of Education, University of Southern California. A summary of Dr. Thompson's view appears in his article "The Levels of Objectives in Education," Harvard Educational Review, 13 (May, 1943), 196–211. Dr. William H. Burton, Graduate School of Education, Harvard University, summarizes Dr. Thompson's concept in his book, *The Guidance of Learning Activities* (New York: D. Appleton–Century Company, 1944), pp. 269–270.

programs are those built on actual situations. They try to find the wants, needs, and problems of people, of a farm or family, or a community, before going to work. Those are the working objectives without which effective extension teaching cannot take place.

Figure 11. Terracing with a tractor. Relating new farm tools to new uses of land requires major decisions by farm people.

Let us examine this question further. The difference between wants and needs is roughly the difference between *what is* and *what should be*. An extension worker who is alert to the wants of rural people and tries to help people satisfy these wants is acknowledged to be superior to one who goes out to sell a program unrelated to local desires. The successful extension worker also relates the needs which *he sees* for rural life to the desires and wants of people. These desires and wants are the peoples' objectives and can be changed and enlarged by educational processes initiated by extension workers.

A county agricultural agent was once engaged in assisting some potato growers to form a cooperative marketing association in an area where potatoes were a large commercial crop. The growers had decided to organize, if they could get agreements from their members to market a sufficient number of carloads of potatoes to give an economical volume of business. One of the growers, when ap-

proached, refused to sign up, because, as he said, "If they will give us the price, we can market our own potatoes." By the word "they" he referred to the buyers, the receivers, the commission merchants, and all the people at the other end whose interests he thought were opposed to his. He thought all he needed was a better price for potatoes. At least that is what he said. Maybe it was not the whole truth. Maybe he gave that as the reason to cover his lack of confidence in the county agricultural agent or some of the farmer leaders. The majority of the growers present that day seemed to think that what they wanted was an orderly system of marketing and a sufficient volume of potatoes to carry the cost of operation. Usually what we say or think we want is based on what we know or feel at the time. Our knowledge increases and, although the situation is the same, we may express a different desire. We could go on and philosophize on what are true needs and what are imaginary needs. You can have your ideas about what Jim Jones needs, and Jim may have his ideas about it too. How then can we reconcile these two approaches to our work?

The history of extension work indicates that there was an early period when men of science brought to the farmers what seemed most needed from the scientific viewpoint. Then in the first years of extension program planning came an attempt to list all the needs of each community and consolidate them into a program which, we were proud to say, was based on the farmers' own statements of his needs. The third phase, which seems to be the more mature, is a combination of these ideas of the specialists about what is needed with the wants and desires of the members of the family. This procedure provides a way to set sound working objectives. It makes use of both real needs and wants or "felt needs." We shall see in Chapter XI how each situation is studied, and how problems are discovered and clarified.

It is essential to reach working objectives through full discussion. Rural people working with the professional extension staff must work down through the general to the specific. This is in fact a step in the educational process itself.

The Fundamental Objective

"It is the function of the Extension Service to teach people to determine accurately their own problems, to help them to acquire knowledge and to inspire them to action, but it must be their own action out of their own knowledge and convictions." [4] M. C. Burritt, a master farmer and formerly director of extension, New York State College of Agriculture, made this statement years ago. It is generally accepted as our fundamental objective.

General Objectives of Extension

The following four quotations represent what we mean by *general objectives.*

I. Progress in agriculture is fundamental to progress in the nation. It is marked by constantly improving physical and social well-being. Agricultural progress takes place as the people in the open country achieve, in ever greater amount and juster proportion, the highest planes of (1) wealth, (2) health, (3) knowledge, (4) sociability, (5) beauty or art, and (6) righteousness, which we as an American people, have come to believe are associated with superior personal well-being and worthy of our loftiest purposes.—A. R. Mann, former dean of the New York State College of Agriculture.

II. The following statement for boys' and girls' work is from a report of the National Advisory Group on 4-H Postwar Programs (published by the Extension Service, U.S. Department of Agriculture).

The ten guideposts of the national plan represent a restatement of 4-H Club broadened objectives:

1. Developing talents for greater usefulness.
2. Joining with friends for work, fun, and fellowship.
3. Learning to live in a changing world.
4. Choosing a way to earn a living.
5. Producing food and fiber for home and market.
6. Creating better homes for better living.

[4] M. C. Burritt, *The County Agent and the Farm Bureau* (New York: Harcourt, Brace and Co., 1922, out of print).

7. Conserving nature's resources for security and happiness.
8. Building health for a strong America.
9. Sharing responsibilities for community improvement.
10. Serving as citizens in maintaining world peace.

III. A quotation from the pen of C. B. Smith reflects years of rich experience and is probably one of the best statements to promote general understanding by the public that has ever been made:

Stated in brief form, some concrete objectives of agricultural extension are:

1. To bring the farmer the knowledge and help that will enable him to farm still more efficiently and to increase his income.

2. To encourage the farmer to grow his own food, set a good table, and live well.

3. To help the members of the farm family to a larger appreciation of the opportunities, the beauties, and the privileges of country life, and to know something about the world in which they live.

4. To promote the social, the cultural, the recreational, the intellectual, and the spiritual life of rural people.

5. To place opportunity before rural people whereby they may develop all their native talents through work, recreation, social life, leadership.

6. To build a rural citizenry, proud of its occupation, independent in its thinking, constructive in its outlook, capable, efficient, self-reliant, with a love of home and country in its heart.

IV. At the Administrative Workshop held in Wisconsin (November, 1946), participated in exclusively by extension directors, associates, or assistants, the following statement was adopted and may be considered an authoritative agreement of minds.

The ultimate objective towards which Extension work is directed is more fruitful lives and better living for all people. Efforts of the Extension Service to attain this objective include:

1. Improvement of the economic, social and spiritual well-being of the farm family.

2. Improvement of farm income through the application of science and farm mechanization.

3. Encouragement of people to be wiser consumers.

4. Improvement of health through better nutrition and more adequate health facilities and services.

5. Improvement of family living through better housing, rural electrification and more adequate labor saving equipment.

6. Improvement of educational and recreational facilities for the home and the community.

7. Development of a better understanding of and more effective participation in community, state, national and international affairs to the end that constructive policies may be determined.

8. Improvement of the conservation of resources so that future generations also may have a good living and the general welfare be thereby safeguarded.

Working Objectives

An extension worker who participates with rural people in a discussion which results in written objectives is dealing with *working objectives.* The wording of clear-cut objectives is a skill in itself. To take loose statements from a discussion where objectives at all three levels involving social and economic improvement are tossed about, and to state them in terms of behavior or changes in people are a challenge to the extension worker's own comprehension. To do those things requires care in the use of words. Avoid incoherent, vague statements. Use straightforward wording, and make complete sentences if possible. When lists of phrases are to follow a sentence it is better to be consistent by beginning each phrase with the same grammatical form, whether an infinitive, or a participle, or some other part of speech. (*Example:* "To increase the yield per acre of silage corn, by using hybrid seed, by following a four-year rotation, by fall plowing the sod, etc." Other infinitives commonly used are to learn, to help, to aid, to know, to understand.)

Most extension objectives have economic or social outcomes resulting from the desired educational change.

Extension Objectives Must Be Educational

Education is the production of changes in human behavior. The test question as to whether or not an activity becomes educational is: "Does the activity result in changed behavior on the part of the person to whom the education is directed?" Changes brought about in the process of education may usually be classified as:

a. Changes in knowledge or things known, in amount of knowledge, in kinds of knowledge, in habits or habitual traits.

b. Changes in skills or things done; in how easily and effectively the person does something; in the number and complexity of things he can do well. Skills may be divided into two groups, namely:

Figure 12. Picking oranges, like other farm practices, involves problems of knowledge, skill, attitude, and equipment.

THINKING (ways of thinking, ability of the person to work out solutions, and ways he meets new problems).

MANUAL OR PHYSICAL (such as pruning a tree—how successfully or how well is he able to do it?)

c. Changes in things felt. In addition to knowledge and skills we have tendencies toward certain behavior or points of view—these are attitudes (what one does when he has perfectly free choice in the matter shows his "attitude"). Attitudes may be classified as:

(1) Sensitiveness (awareness of certain things, alertness).

(2) Personal, social adjustment (getting along with oneself and other people).

(3) Philosophy of life (efforts to develop an over-all understanding of life).

(4) Appreciation (emotional response and changes in things valued).

Economic Outcomes

Probably a majority of extension objectives have economic outcomes. Often they are stated directly with the educational change implied but not stated. This short cut is not recommended. Examples of economic outcomes are:

a. Increased income
b. Increased crop yields
c. Improved soil fertility
d. Better financial management in the home
e. Making of clothing
f. Reduced loss from insect pests
g. Food preservation
h. Better marketing methods

Social Outcomes

A broad interpretation of the educational objectives of extension involves social outcomes. These can be measured for example in terms of:

a. Improved health
b. More adequate housing
c. Development of leadership
d. Better grooming
e. Home conveniences
f. Better home grounds
g. Recreational opportunities for youth
h. Development of cooperation
i. Interest in better government
j. Acceptance of responsibilities of citizenship

The process of attaining these objectives consists fundamentally of assisting people to recognize their needs, to analyze their problems, and to find and apply solutions to them. How to do this in the speediest way is the most basic of all questions in the minds of good extension workers.

Defining Objectives

The grouping above is still vague and general. The more definite an objective the more useful it becomes. In fact, we shall see in the study of evaluation (see Chapter XVII) how difficult it is to measure progress without a well-defined objective. Make a point of analyzing the words used. For example, what does increased yield mean? Does it mean tons per acre or bushels per tree? How much increase is expected? Is the increase a matter of one season or an average over a period?

Consider the following objective: To influence farmers to adopt strip cropping in Tompkins County. Let's define what we mean. "Influence" refers to all the pressures which tend to encourage the practice. Some of these may be entirely outside the work of the extension service, but it is intended that all the methods bearing on strip cropping will be included.

"Adopt" means "to understand and use in the farm plans and operation." It involves rearranging fields, fences, and farm roads.

"Strip cropping" in Tompkins County means growing crops, whether intertilled or not, in long areas, generally from 30 to 75 feet wide and of any desired length, but with the top edge and bottom edge conforming closely to the contour. It involves laying out strips with a farm level or surveyors' transit, as any makeshift is not dependable. Strips are seldom of a uniform width unless the slope of the land is uniform. Strips of crops running along the hillside but not laid out carefully on the contour are not considered strip cropping.

"Farmers" means the list of 2,000 landowners and operators on records in the county agent's office.

This is what may be called *defining the objective*. Thousands of objectives have been in use for years without any careful definition. Defining them is not the job of the farm people with whom we work —they have their own ideas of what the words mean when they hear them in meetings or read them somewhere. But the people have a great many different ideas. If we are to hold to the concept of objectives as being direction finders, we who attempt to furnish some

leadership and guidance must sort, analyze, and define until we have made the words help us by their clearness and definiteness. Generalities may serve to create interest, but only specific statements challenge thought and facilitate action.

Criteria for Judging Objectives

Several tests may be used to judge the usefulness of objectives.

1. Are they dynamic? Are they likely to promote action?

2. Are they socially desirable? Will they lead toward the general aims of extension?

3. Are they achievable by the level of maturity of the group and permitted by available resources?

4. Are they developmental? Will they lead to constantly higher levels of achievement?

5. Can they be defined in terms of behavior or changes in people?

6. Can they be evaluated? Are they measurable? Can evidence of actual progress of individuals be secured?

7. Are they specific?

The process of arriving at these working objectives cooperatively with farmers and families and the choosing of a limited number for work in one year or a given period of time is a part of program planning. Since we teach at the point of interest and learning, using small or specific practices, we naturally are more often concerned with the objectives at this level. These, however, all contribute to progress toward our general objectives and in the course of time bring us nearer our fundamental objectives.

The Philosophy of Extension

A discussion of general objectives by a group of rural people and extension workers would no doubt bring forth from some practical person a remark such as this: "Well, that's all right; it sounds good, and we agree with it—but what are we actually going to do here in our community?" At this point it would be well for us as extension workers to recall the three levels of objectives and to direct the conversation at the level of interest of the people who are to be influenced. Since an objective is "a direction of movement," we must

start from where we are. Then there may follow a discussion of local conditions and the need for better food habits in the families, or for the formation of a potato spray ring to avoid losses by blight, or for the introduction of better livestock, or for a campaign to pre-

I pledge—

my head to clearer thinking,
my heart to greater loyalty,
my hands to larger service, and
my health to better living,

for my club, my community, and my country.

Figure 13. The 4-H Club member's pledge sets his general objectives; then choice of a project sets the specific objectives.

vent losses from poultry disease, or for the formation of a local 4-H Club for boys and girls. From here on it is the field of program planning. These expressed wants and needs are intermediate and immediate objectives. They are the necessary steps we must take in the process of our journey toward the distant, over-all objectives.

Neither kind of objective can do without the other. For if we get the better bulls and the larger yield of potatoes and even the profit from them, we are only a few steps advanced. Even this must be converted into satisfactions for the family in terms of the six items of physical and social well-being given by A. R. Mann above in his remarks concerning progress in the nation. There may be satisfactions even if there are no profits—boys and girls in 4-H Clubs may be content with learning skills and habits of workmanship. However much we may work with the humdrum things and the specific things of the farm and home, however well we may organize and pile up our scientific facts and services, the ultimate and primary purpose of it all is the development of the men and women and the boys and girls themselves. The devices and methods are only necessary means to an end.

The philosophy of extension work, therefore, is based on the importance of the individual in the promotion of progress for rural people and for the nation. Extension educators work with people to help them develop themselves and achieve superior personal well-being. Together they establish specific objectives expressed in terms of everyday living, which lead them in the direction of over-all objectives. Some will go far in one direction while others will make progress in another direction. Progress varies with individual needs, interests, and abilities. During this process the whole community improves as a result of cooperative participation and leadership development. There are signs that some of the more general social objectives may be reached. After years of consistent work we dare to point out progress in better citizenship, democracy, and appreciation of science.

The extension worker who understands this and keeps this philosophy as his fundamental objective will approach his work as teacher with adequate perspective and will have a permanent influence upon the situation in which he finds himself. This philosophy of extension work thrives best in the man or woman who holds a deep concern for the well-being of all mankind and an abiding faith in rural people and their ability to develop and reach what A. R. Mann called "the highest planes."

CHAPTER XI

Building Extension Programs: Definitions and Principles

SINCE the county is the basic unit of work for the Extension Service it is natural to consider from the outset how to establish a sound, well-balanced rural program in every county. Statewide programs or policies cannot stand without a firm foundation of good programs in the counties, although each is eventually partially dependent on the other. Organization and program planning occupy 18 per cent of the time of county extension agents.

Historical Experience with Programs

In Chapter X we referred to three phases in program planning through which the Extension Service has passed. They have been well described by F. B. Morris [1] as follows:

In the early days the programs were predetermined, and farmers received what was offered by the pioneer agents. Farm problems were apparent in the early days of agricultural education, and programs were relatively easy to prepare. The boll weevil destroyed the cotton. Smut reduced oat and wheat yields, and sour soils caused clover failure. The solutions were fairly simple and easy to apply. In the main the demonstration method was used as the teaching agency. Thousands of farmers could readily see these demonstrations, and as a result many improved farm production practices were adopted.

In the second phase, extension leaders saw that county extension organizations served as agencies not only through which agricultural information could be extended to farmers, but through which local farm

[1] *Planning County Agricultural Extension Programs,* U.S.D.A. Extension Service Circular No. 260 (1937).

experiences and problems could be suggested by farmers as a basis for programs and further research. Thus farmers were soon made a party to the planning. Sources of farm income were listed in thousands of communities, factors limiting those incomes suggested, and projects selected on the basis of those factors by local people. These community programs were coordinated into county programs by a county program-planning committee, or by the county agent and a committee of the county extension organization.

The historians called this the period when programs were self-determined rather than predetermined as in the beginning. This was a very significant period in the history of extension program planning. Thousands of farmers, for the first time in their experience, were given an opportunity by the Extension Service to gather around farm dining-room and kitchen tables, in schoolhouses and grange halls, collectively to study and plan action on their problems.

This type of planning served a useful purpose, but after a number of years the weakness of the plan became apparent. County programs too often grew to be long lists of miscellaneous projects organized to meet the many and varied requests from each community. Such programs tended to call for far more activity than the county agent could effectively carry out. He spread his time and energy over too many fields of work, or upon problems that were not of vital importance. Farmer leadership was not sufficiently developed, nor were agents experienced in selecting and training them.

Close study with farmers of the factors limiting farm income and the increase in economic knowledge revealed the importance of economic, social and biological facts in program planning. Mistakes in farm business judgment, as well as errors in production practices, were known to affect farm income materially. Poultrymen may cull their hens skillfully and apply management practices that reduce the number of hens they have to cull, only to find the production efficiency offset by the failure to reckon with the effects of seasons, cycles, and price levels. A dairyman may balance the production of farm feeds for winter and summer, raise the milk and butterfat production of his cows, but he discovers that the general price level, the cow cycle, and factors such as size of business, selection of enterprises, and labor efficiency have their influence on his farm income.

Thus in the third phase, farm-management, social trends, and economic facts as well as production factors were introduced in county

program-planning procedure. This gave great impetus to the gathering and assembling of facts by specialists upon which to build programs. In this fact-determining period in program planning, effort was made in some states to find the larger farm problems and to make plans of work that provided for a concerted attack for a long period on those problems. County-wide commodity or project committee planning began to supplement and often replace the community committees' planning in an attempt to get away from the overcrowded program which was made up of many activities.

At this point there began to be district and county land-use planning and so-called conference boards, all of which involved rural policy (see Chapter XIII).

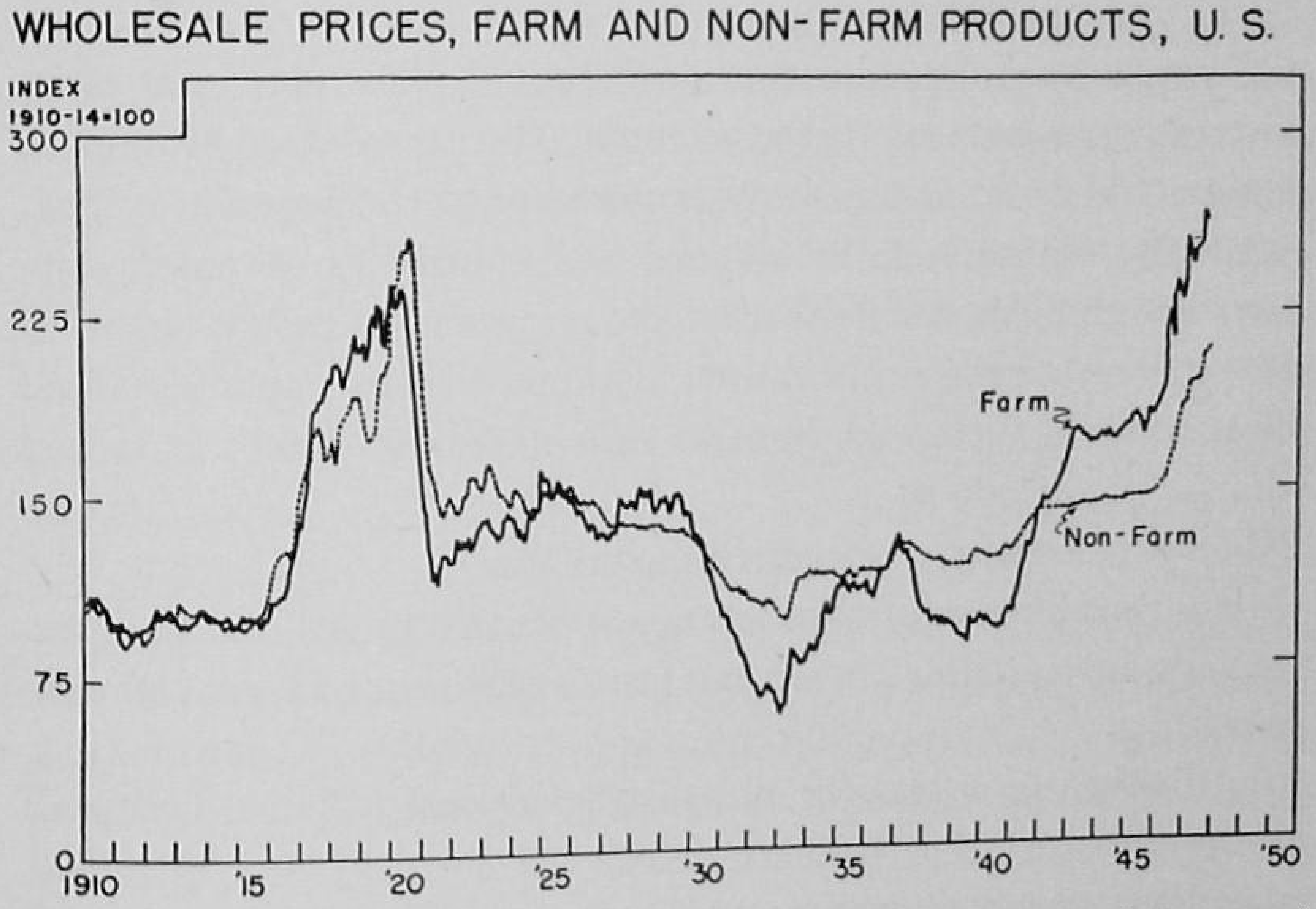

Figure 14. Extension program building must begin with a knowledge of the general price level and other basic facts.

The development of large regional and national agricultural plans, whether temporary or permanent in nature, has complicated the process of program building at the county level. Sometimes the national emergency programs crowded out local planning entirely. The task is no longer a simple one. Experience has taught that the simple

type of program which dealt largely with biologic factors of production will not meet the needs. Farm leaders and extension agents recognize that agriculture is changing constantly and that extension programs should be designed to help make the necessary adjustments most quickly and effectively. Great social and economic situations must be understood. National and international situations and trends must be considered. Wiser policies of land use in large areas must be developed. There is much more information available from the census, planning boards, farm accounts, surveys, and the like, which requires organization, analysis, and interpretation. More evaluation field studies need to be taken. Programs must be more extensive than a mere list of proposed demonstrations.

Why Have a Program?

Every successful public movement must have a statement of its purposes that is clear to the citizens. The soundness, timeliness, vitality, and economic or social importance of the program is what eventually determines the amount and continuity of public support. The published statement of the purposes is a public record of the program of the organization. Because it takes much time and effort to build such a program there is sometimes doubt as to just why we need to do so.

Ten reasons why we need a program are:

1. To ensure careful consideration of what is to be done and why.
2. To have available in written form a statement for general public use.
3. To furnish a guide or straightedge against which to judge all new proposals.
4. To establish objectives toward which progress can be measured and evaluated.
5. To have a means of choosing: (a) The important from the incidental problems; (b) The permanent from the temporary changes.
6. To prevent mistaking the means for the end, and to develop both felt and unfelt needs.
7. To give continuity during changes in personnel.
8. To aid in the development of leadership.

9. To avoid waste of time and money and promote general efficiency.

10. To help justify appropriations by public bodies.

Because extension work is historically and characteristically a cooperative venture, the parties to the necessary agreements should clearly understand the proposals and the division of labor. This administrative problem requires a definite program.

What Is an Extension Program?

The word "program" has nine distinct meanings in the dictionary. When used by an organization it means a prospectus, or a statement issued to promote understanding and interest in an enterprise. When preceded by the word "extension" the word takes on all the implications of its usage in the service of various states. An extension program, like that of any public organization, should give not only *what* is needed, but *why*. It should be an elaboration of the organization's public policy in such a way that anyone can find out just how the policy affects him. In this sense it is not a list of activities or calendar of work. For our purposes, an *extension program* is a statement of situation, objectives, problems, and solutions. It is relatively permanent but requires constant revision. It forms the basis for extension plans.

A *plan of work* is an outline of activities so arranged as to enable efficient execution of the entire program. It answers the questions how, when, where, and by whom the work is to be done. A *project* is an outline of procedure and pertains only to some phase of extension work. A *calendar of work* is a plan of work arranged chronologically. Such a calendar of work may be made out in skeleton form for a year or more in advance, placing the important events under each month. This may be accompanied by a detail calendar of specific dates continuously in preparation three months in advance. Seasons of work and habits of work may make it desirable to prepare a calendar of work quarterly.

Some extension workers prefer to define an extension program as including the *plan of work* because neither part standing alone is complete. It might be argued that of the two it is more important

to know *what* you are going to do than *how* or *when* you are going to do it. Certainly farmers and their families are more interested and know more about the first, namely, the program. Professional extension workers, on the other hand, must make it their business to be proficient in methods and procedures required in the plan of work.

Next, it is essential that the principles behind the process of building this program be generally accepted and that they be covered by the plans in use. There has been no uniform approach to program making in the extension service. This may be an indication of resourcefulness or of a wide divergence in conditions. But to beginners, strangers, or outsiders (and some insiders) the whole program-building process has often seemed a jumble of words. This suggests the need of further definition of terminology. The greatest need is to know what a good program is. Once this is understood we can deal with the principles underlying the program-building process. Then procedures for reaching it can be left to choices from a wide range of conditions, habits, and terminology within the states.

Terminology

Extension workers have been accused, like many other groups, of having a jargon of their own which builds itself up until an average human being has difficulty in following the conversation. Our purpose here is to define terms as they are needed and to avoid jargon by using ordinary words. There is no need to put the system in a vise of verbiage and to attempt to fix word usage for all time. But there is need for establishing uniform understanding of a few simple terms.

One point at which the Service is compelled to define terms is in reporting on a national basis. The words used must be generally accepted by members of the extension teaching profession everywhere. Workers also have an obligation to each other to be more precise in the use of extension terms. Evaluation of programs and work also requires exact definition of words used.

From the score of definitions given in the federal report form we quote here only three as follows:

1. A *community* is a more or less well-defined group of rural people with common interests and problems. Such a group may include those within a township, trade area, or similar limits. A community is one of the several units into which a county is divided for conducting organized extension work.

2. A *cooperator* is a farmer or homemaker who agrees to adopt certain recommended practices upon the solicitation of an extension worker. The work is not directly supervised by the extension agent, and records are not required, but reports on the success of the practices may be obtained.

3. A *project leader, local leader,* or *committeeman* is a person who, because of special interest and fitness, is selected to serve as a leader in advancing some phase of the local extension program. A leader may be either an organization or a subject-matter leader.

Some other terms commonly in use are:

1. Home demonstration organization, or club, or group: A group of rural women who, under the advice of a county advisory council or other committee, take part locally in group activities sponsored by the Extension Service to improve family living and community life.

2. Special interest group: A group organized around a particular interest common to the members. Examples of this are commodity associations, home economics organizations, 4-H Clubs, young adult organizations, agricultural and home economics committees of civic groups.

3. County advisory council or county extension board: A policy forming group, made up of rural people, each of whom may represent an area or a local organization. Its duties include program planning, organization for conducting programs, and sometimes policy making.

4. Commodity committee: A group of producers of a particular crop or commodity, with a common interest and competent judgment, who are generally used in building a county program and in executing the plans.

5. Community committees: Groups of rural people representing different sections or types of farming of the area. The committee may include local representatives of other organizations.

6. Administrative leaders: A general term to indicate local people

who serve on the county or community committees, or councils. Their duties are organizational, such as deciding upon operational matters, selecting teaching leaders, arranging meetings, presiding, and interesting other persons.

7. Teaching leaders or subject-matter leaders: Local people who teach local groups the subject-matter information and skills they themselves have learned at extension training schools.

8. Neighborhood leaders: Local men and women who may be either teaching or administrative leaders assisting in a neighborhood area. Such leaders did useful wartime work.

9. Participants: Men and women or boys and girls who have attended meetings, telephoned, or called personally at the agent's office or requested a visit, bulletin, or other help from the agent.

We have previously defined objectives as used in extension program building. It is important therefore to reserve the term for that purpose and to avoid its use in other ways; for example, say "the purpose of the meeting," not "the objective of the meeting."

Principles of Program Building

In considering the following list of principles it is important to bear in mind that we are not dealing with procedures themselves but the elements essential to sound procedure.

Sound extension program building:

1. Is based on analysis of the facts in the situation.
2. Selects problems based on needs.
3. Determines objectives and solutions which offer satisfaction.
4. Has permanence with flexibility.
5. Has balance with emphasis.
6. Has a definite plan of work.
7. Is a continuous process.
8. Is a teaching process.
9. Is a coordinating process.
10. Provides for evaluation of results.

Let us examine these principles more in detail.

1. *Sound program building is based on analysis of the facts of the situation.* It is important to take into account all the facts concern-

ing the land, the people, the homes, the communities, the organizations, the institutions, and the agencies operating in the area. These facts must be viewed in terms of established long-time objectives and rural policy. The outcome of previous plans should be reviewed and the results summarized and appraised. Factual material may be grouped around some unit such as family, community, or major type of farming. There are three fundamental sources of facts: the federal government, the land-grant colleges, and the rural people themselves. Factual material is obtained from practice surveys, scientific sampling procedures, the census, economic and social trend studies, planning-board reports, and other similar sources. It implies a look ahead to changes in crops, population, consumer demand, etc. The assembling of these data in a form which is permanent and usable, yet easily subject to revision, is a challenge. The analysis of the material in a form which will help leaders to do their part in making judgments is an art in itself. It requires careful thinking by agents, specialists, and farm people—all working together. Differences in history and cultural background must be recognized.

2. *Sound program building selects problems based on needs.* Not all the problems can be attacked at once. It is necessary to select those most urgent and of widest concern. Choice of problems must be from among those brought out by the analysis of the facts regarding what are felt and unfelt needs. To be effective, extension work must begin with the interests of the families. It must meet those interests and use them as a springboard for developing further interests. Often in the past, problems have been assumed which had no adequate justification in the facts of the situation. It is a temptation to copy some successful work from another area, or to do some popular or dramatic thing which nevertheless is not a problem arising from the facts or the needs of the people. It may be said that the problems of people are a part of the situation. So they are. But for our purposes we want *all* the facts and only certain selected problems. It is helpful to place facts in a category by themselves. This reduces the chances that some strong minority group may "write in" a problem which it feels is important before all the facts regarding other problems have been presented for consideration. The state-

ment and wording of these problems is not easy. State the problem from the point of view of the farm, family, or community. Do not state problems of extension workers as if they were farm or home problems. How to write the program is discussed in Chapter XIV.

3. *Good program building determines objectives and solutions which offer satisfaction.* In Chapter X we saw the necessity for well-defined objectives and pointed out why we are chiefly concerned with specific working objectives. In order to hold interest we must set working objectives and offer solutions which are within reach and will give the satisfaction of achievement. This is related to motivation for action. People must see how they or their communities are going to benefit from the proposed solution. Very often the simplicity or dramatic effect of the practice recommended is the most potent factor in its wide adoption. An example is the use of DDT to kill flies in stables. Again it may happen that for an important problem the only available solution is so complicated or expensive or long-drawn-out in its application that farmers grow weary, or housewives will not bother with following the instructions. We may work for years and show only limited results. An example of this is the problem of keeping farm records and accounts. The solution for the same basic problem may not be the same in different regions or counties where conditions differ.

4. *A good program has permanence with flexibility.* Any good program must be forward-looking and permanent. Soils are built up only through long years of consistent and wise effort. Health is acquired through the long-continued application of correct eating, proper clothing, and other habits of right living. Permanence means anticipating years of related and well-organized effort. Along with this slower process, which both follows and makes long-term trends, it has been found that particular items will need to be changed to meet unforeseen contingencies or emergencies. Without flexibility the program may not in fact meet the needs of the people. A program should be prepared well in advance of its execution but not too far ahead of time. Ordinary events may subject it to change in part though not in total.

5. *A sound program has balance with emphasis.* This is another

of the principles established in the early days by M. C. Burritt,[2] formerly director of extension in New York State and a pioneer in the work. It would be unusual if all the people in a county were in-

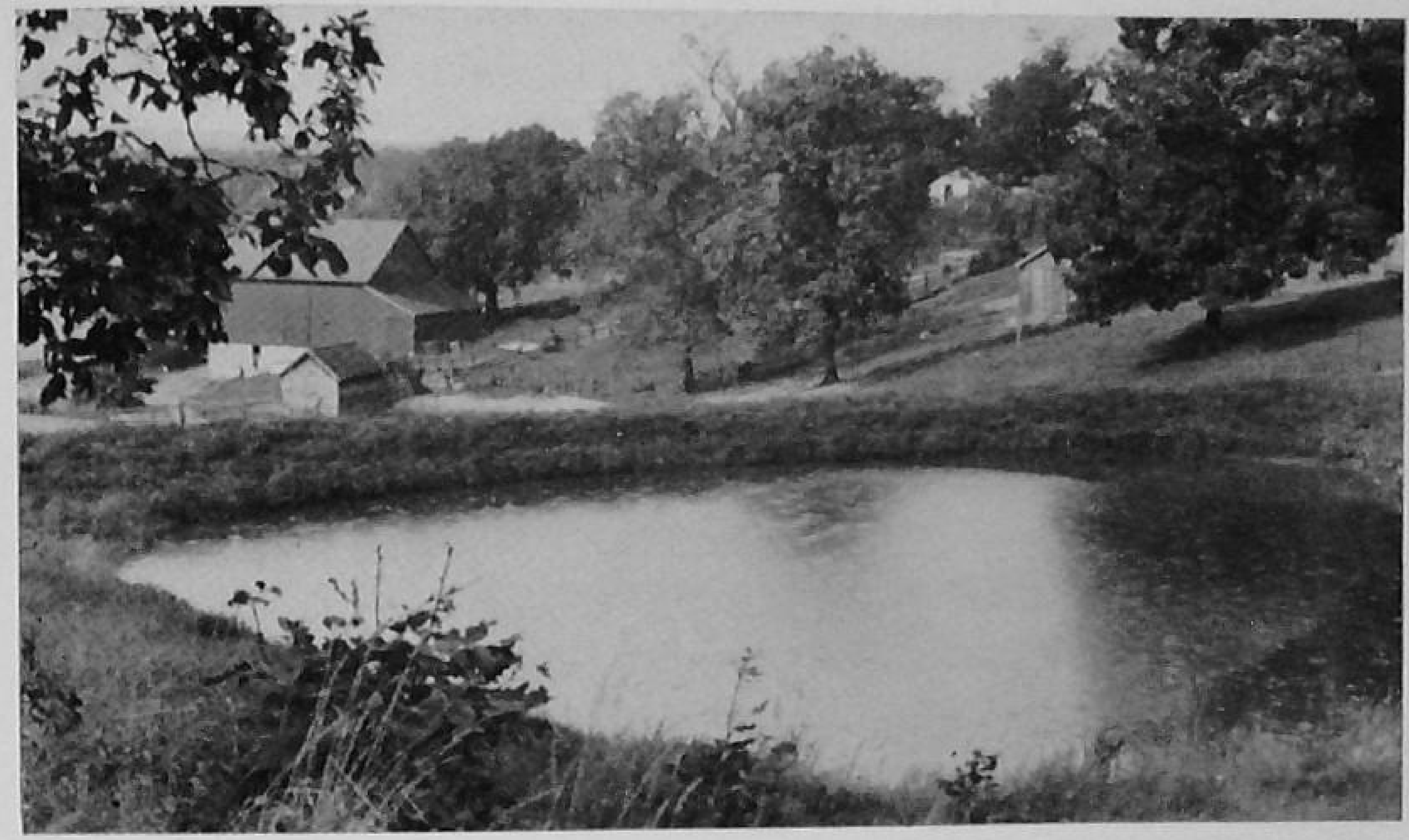

Figure 15. A farm pond has a long-time influence on farm and home planning, in relation to soil moisture, recreation, labor saving, and sanitation.

terested in one thing. A good program should cover the majority of their important interests. It must be comprehensive enough to embrace all age groups, creeds, and races at all levels, and community, county, state, national, and international problems. It is futile to deal with only one phase of life in a community as an end in itself. At the same time a few of the most important or timely problems should be chosen for emphasis. To avoid scattered effort something must stand out. Decisions must be made as to which of the needs are most urgent. Once the whole field has been examined to ensure a well-balanced approach, such special problems as marketing, health, housing, or some emergency situation may be chosen for particular emphasis. The next consideration in choosing items for emphasis is to promote efficiency by permitting a good distribution of time and effort throughout the year. Too many things carried on at the same time will divide either the agents' or the people's attention.

[2] *The County Agent and the Farm Bureau* (New York: Harcourt, Brace and Co., 1922, out of print).

6. *A good program has a definite plan of work.* No matter how well the program is *thought out* it is of no use unless *carried out.* This implies good organization and careful planning for action. A plan of work, we said, is an outline of procedure so arranged as to enable efficient execution of the entire program. It is the answer to what, where, when, and how the job will be done. The action planned must include:

a. People to be reached.
b. Goals, dates, and places.
c. Teaching procedures to be followed.
d. Duties, training, and recognition of volunteer leaders.
e. Part to be played by extension personnel.
f. Part to be played by other agencies.
g. Plans for measuring results.

In planning an extension program at the county or community level, it is desirable to set forth the total program to be undertaken whether it is concerned with the business of farming, with family living, or with the community as a whole. In carrying out program plans, different leaders and groups may work on various phases; that is, the women in the community may work on one segment, the men on a second segment, and 4-H Club members and older youth groups on a third. Organization should be used as a tool to accomplish these purposes, never as an end in itself. The process of carrying out the plan of work is given in Chapter XV.

7. *Program building is a continuous process.* It is never finished. The situation changes through economic and social trends, through action of people locally or of governments, and otherwise. Problems change, emphasis changes, and phases may be completed. Each phase must be carried out with dispatch to aid in giving satisfaction with developments. Solutions change; new and improved practices and materials are found. Objectives change; people may see more clearly what they need.

8. *Program building is a teaching process.* People must participate —not merely take the offerings of extension workers. Through participation they become interested in assuming more responsibility by:

a. Obtaining information, local surveys, neighborhood observations, etc.

b. Thinking, analyzing, deciding the relative importance of various problems.

c. Deciding on problems first and activities second.

d. Acquiring new skills and attitudes.

The Extension Service must furnish information of the kind and type most useful. Its specialists will develop methods which set the stage for learning and leadership training.

9. *Program building is a coordinating process.* It finds the most important problems and seeks agreement on definite objectives. It coordinates efforts of all interested leaders, groups, and agencies and considers the use of resources. It obtains the interest and cooperation of many people by showing them why things need to be done.

10. *Good program building provides for evaluation of results.* All the other principles of program building are related to evaluation. As we shall see later, all attempts at evaluating extension work are dependent on clear objectives, knowing what people you are trying to reach, exactly what you are trying to teach, and having records of the results in terms which show changes in the action of people. Starting a program with the intention of engaging in a careful evaluation at the close of a specific period has a salutary effect on all the intermediate processes. Field studies of extension work should help to increase efficiency and put extension methods as well as the content of teaching on a more sound and effective basis.

CHAPTER XII

Building Extension Programs: Organization and Participation

WITH the principles of program building in mind we are ready to think about how to proceed. This involves group action, or organization, and individual action. By setting forth *what* needs to be done, we hope to avoid confusion over minor differences as to *how* it shall be done. The organization set-up may serve with respect to both long-time programs and annual plans of work.

Organization Needed Nationally

The director of extension in the U.S. Department of Agriculture and his representatives provide the necessary organization at the national level to obtain basic program data from the Bureau of Census, Bureau of Agricultural Economics, and other agencies of the government. Many things which affect agriculture and home life are beyond the control of individuals or even counties and states. The facts about industrial conditions which affect consumption of agricultural products, the prices of things farmers buy, international relations that influence exports and imports, foreign competition, and weather conditions are all matters which are best handled on a national basis. The proper utilization of the vast resources of our federal government is not accomplished without preparation and organization at Washington, D.C. The federal Extension Service is authorized to impart education and information on all phases of rural life to out-of-school adults and youth.

An example of how the national Extension Service can point out national problems needing attention is the *Report of the*

Committee on the Scope of Extension's Educational Responsibility.[1]

Organization in the States

Thus far we have said nothing about state programs or work of state committees. State extension programs are either compilations of the work of counties, or they may deal with regional, type-of-farming, or public problems. The latter type of state program may be partly executed through legislation and the participation of various organizations; it involves the development of rural policy, a subject discussed in Chapter XIII.

What then is the essential state organization needed to aid program development?

A. Committees of farmers, farm women, youth, and others who are chosen as best qualified to think constructively on all matters affecting the farm, home, and community.

B. Committees of extension administrators, specialists, and supervisors chosen and qualified to assemble facts, analyze situations, prepare summaries of these, facilitate coordination of all interested departments and agencies concerned with various broad fields, such as types of farming, family living, youth, and 4-H Club work. Various subcommittees of such professional workers are useful and may include county workers.

The separation of professional committees from nonprofessional ones does not imply that they do not work together. On the contrary, they should work in close harmony. If the service is to be cooperative in fact, then the people must share the actual responsibility for determining what action shall be undertaken. In arriving at final recommendations, professional extension workers and their committees should be content to rely upon presenting their views and factual material to committees composed of farmers and homemakers and should be willing to be guided by their decisions. It would be far less harmful to adopt an imperfect recommendation or lose a few months in arriving at a desired goal than to lose the confidence of the people. Besides, extension workers, like other people, are not infal-

[1] P. V. Kepner, chairman, U.S.D.A., mimeographed, FA-1255, (January, 1946).

lible—their judgments could be wrong. As we have pointed out before, recommendations which are to be carried out by the extension service must come within the framework of its authorized functions. Professional workers will in the end have ample opportunity to make their full contribution.

Important duties which can be performed by state committees are:

1. Promote understanding relationships with the president of the Land-Grant College and the Board of Trustees by personal conferences and brief, attractive reports, by soliciting advice and providing opportunity for observation.

2. Cooperate and consult freely with the Experiment Station and college departments to coordinate recommendations with those of research and teaching, to use equipment and facilities fully, to bring attention to problems arising in the field which need research, and to give credit where credit is due. The following is an example of cooperation at the state level: The Extension Service has played a major role in helping the cotton industry toward a smoother road. Not the least of its contributions has been its successful effort to enlist the cooperation of the Experiment Stations; the Agricultural Research Administration; the cottonseed crushers, ginners, and cotton-marketing and milling associations; the National Cotton Council; and other groups and agencies. State lines proved no barrier as the extension directors, specialists, and county agents in ten southern states mobilized all facts and factors for the job. A balanced cotton-farming program was the product of this cooperation. Based on the results of research and the experience of practical operators, the seven-step program was used as the guidepost on the road to a permanent solution of their problems. The program is not perfect and will undoubtedly be changed somewhat, but it points to a path that thousands of cotton growers are following successfully.

3. Enlist the interest and cooperation, on a functional basis, of all farm organizations, commodity groups, and other organizations including commercial, thus further strengthening democratic processes.

4. Follow state rural policy when recommendations are available from state policy-forming bodies.

5. Work with administrators, supervisors, and specialists to set up all the necessary subcommittees for launching state-wide educational campaigns or other well-organized teaching plans. State commodity committees serve to bring together specialists from several departments interested in the same type of farming, and they aid in balancing programs. A committee of supervisors, county agents, and specialists can do a great deal toward unification of the state-wide program.

6. Advise the state director of extension regarding special needs as they arise, such as additional technical research or data, importance of making field studies of methods, evaluation of results, or improved facilities for the preparation of teaching materials. There is also need for self-appraisal studies in each state as recommended in the *Report of the Committee on the Scope of Extension's Educational Responsibility.*[2] These committees can help to eliminate unnecessary steps and nonessential organization machinery at all levels.

Historically the extension programs of the states were projects which were approved by the U.S. Department of Agriculture. Experience has taught that to get proper coordination of work in the states there must be either a state program or unified plan of work. Only a small part of such a state program will ever be executed at the state level, and then it will be largely as set forth above in the six functions of state committees. The major part of the work will always be executed in the counties. In speaking of the unified plan of work for the New Jersey Extension Service at the state level the administration announced:

> We are thinking of it rather as a "Guide to Program Planning" insofar as its use within the state is concerned. While this material has been assembled with the assistance of local leaders and field agents and represents quite truly the most urgent needs for an extension program, it still serves merely as a guide insofar as development of local plans are concerned. This guide will be placed in the hands of all field agents in the

[2] See footnote 1, page 139.

state on November 1 and will be used by them in discussing the program with local commodity and advisory groups. This state guide to program planning gives the local people a fairly concise picture of the situation as our specialists see it, brings to a focus the most urgent adjustment needs in each field as viewed from a state and national standpoint, and, at the same time, tells the local people what assistance and service the state office personnel is in a position to offer in support of locally planned programs. Each field agent, after consulting with his or her advisors, is expected to draw up a definite specific plan of work for the county or local situation. These plans will be in the state office by January 15 and will be available for study by supervisors and specialists in order that the whole extension staff may have a clear picture of the specific aims to be given emphasis in the coming year.

Organization in Counties

Two types of organized groups are desirable in the counties. The first is the legal county extension organization which is responsible for finances and execution of the program and to which all matters must be submitted for approval. The second consists of all the advisory, planning, and operational committees which build the program and plans, make recommendations, and follow these through the year. This type may be subcommittees of the first group or may be separate committees. There should be, in many cases, interlocking membership to provide for coordination. Many of the functions set forth for state committees may be applied to county committees.

The legal county extension organizations have many names. They consist of county advisory boards, agricultural councils, agricultural committees, extension association boards, or some other combination of names with local significance. These are the bodies to which all programs and plans should come for final approval before being transmitted to the state director or released to the public. That is their administrative function. Most of the program planning is done by other county-wide committees variously referred to as project committees, program devlopment committees, educational committees, type-of-farming committees, commodity committees, home eco-

nomics councils, 4-H councils, and special interest committees, or by some other term. The duties of these groups may be judged partly from their names but are usually specifically set forth in the resolution or action taken by the sponsoring organization when they are created. (See also Chapter XIV.)

Figure 16. County 4-H Club programs are determined by older youth, local leaders, and extension agents working together.

The number and type of these advisory committees should be determined by the variety of problems and social conditions to be dealt with, the number and skill of agents available in the county to work with them, and the length of time such committees have been in use in the county. The latter circumstance is often indicative of the ability of local leaders to function profitably. From the purely administrative point of view the purpose is to get a functioning program. From the teaching point of view the purpose is to provide opportunity for the maximum number of leaders to grow and develop in their ability to analyze situations, clarify problems, define objectives, decide upon solutions, and help make plans of work. As time permits, these people may be expected to evaluate the effectiveness of the work and make suggestions for changes.

Organization in the Community

Since we have defined a community as "one of the several units into which a county is divided for conducting organized extension work," we naturally assume there is some form of organization locally. There may be 4-H Clubs, home economics units or clubs, and community committees or centers. Participation of the 4-H Clubs in making their programs and plans is an accepted practice. Home economics units or homemakers' clubs also help determine what shall be taught in the communities and what activities shall be undertaken. The use of community committees in deciding upon programs is a sound and desirable practice, but the small number which actually function indicates that agents either feel they do not have the time or energy to work with them or they have been satisfied to depend on the various county-wide committees.[3] Community committees are the basis of a grass-roots organization. But the "communities" need not be the communities of the horse-and-buggy days. They should be areas of which the boundaries are set according to the economic and social patterns of the times, and the entire community should be fully utilized in program planning to enable participation by large numbers of individuals and thus to increase effectiveness. The committee should be drawn from all groups interested in the community, as well as farm organizations, churches, cooperatives, and community councils.[4]

Community committees are the source of leadership for county committees. If agents are unable to meet with them, there should be created a system of leader training designed to enable them to meet by themselves, using materials prepared in advance and arranging both to get and give facts. In this way the local extension program is strengthened.[5]

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[3] See *County Extension Organization and Related Social Factors Affecting Extension Organization and Programs*, U.S.D.A. Extension Service Circular No. 448 (March, 1948).

[4] See Dwight Sanderson and Robert A. Polson, *Rural Community Organization* (New York: John Wiley & Sons, Inc., 1939).

[5] See also *Extension Administration, Report of Workshop, Extension Service Farm Foundation, Univ. of Wisconsin* (Madison, 1946) for principles, organization, and procedures in program development.

Participation of Personnel

Having set forth what organization is essential we now consider what part individuals play in this setting. Program building is not a ritual we go through for its own sake. Nobody is satisfied to be forever planning and talking and never actually getting to do the job. We have said that the process is continuous. Therefore the role of each person should be definite enough so that each can do his or her part and then be through for a while. Thus when the seasons roll around and conditions change, new interest will be found. Much depends on making a distinction between that which is a long-time phase of the program and that which is changing and demands immediate attention. Nobody wants to thresh over old straw.

What then is the role of the extension worker? A few things are common to all. The director and his representatives, such as supervisors, field agents, specialists, and county workers, all have the following roles to perform, each in his own way, in connection with program building:

1. To assemble, relate, analyze facts.
2. To help determine objectives.
3. To study wants and needs of people, determine basic problems affecting communities, other areas, and special interests.
4. To decide upon practical solutions to problems, or answers to wants and needs.
5. To help decide which problems need immediate attention.
6. To develop complete procedures and train staff.
7. To teach and strive for larger participation by the people.
8. To coordinate all efforts and resources of other agencies and groups.
9. To evaluate results as an aid in future program building.
10. To publish and distribute programs.

In addition, each of these workers has a role that is unique and that he alone may perform.

The State Supervisor's Role

The state supervisor's role arises partly out of the opportunities for observation of programs and results which his job provides. With

respect to a county program he aids in procedures for program development and later assists in carrying it out. He has the role of both administrator and teacher. Because of the cooperative nature of the work, he outlines and suggests procedures. He makes recommendations, relying upon their merits and the full play of discussion and democratic processes to obtain their acceptance or revision.

Knaus and Hearne say: [6]

> The responsibility for preparing a program rests with all the extension staff. Supervisors should work with both agents and specialists. Their particular responsibility is to initiate the procedure for developing programs and to help agents, rural people, and specialists in carrying out this procedure. Supervisors have the distinct responsibility of so guiding the development and execution of this program planning procedure that it becomes a valuable teaching process. . . .
>
> Supervisors have the constant job of teaching agents the most effective methods of program building. Agents have the constant job of guiding rural people in program building. In developing program building procedures and in executing these procedures the supervisor is teaching agents to teach people how to discover and analyze problems, to see and understand possible solutions, and the necessary steps to be carried out to get the solutions used. . . .
>
> Supervisors help agents plan and arrange opportunities for the completed program to be reviewed and discussed by all organized groups in the county.
>
> Supervisors have the responsibility of helping other members of the state staff to review and discuss county programs.

The Specialist's Role

The specialist's role is to provide effective educational leadership in a subject-matter field. He aids the supervisor and agent in the procedural work, but he is primarily responsible for solving problems in ways that are scientific as well as practical, economical, and easy to apply. He originates teaching methods and devices. He prepares written materials and visual aids and should be competent in all extension teaching methods. His first obligation is to train the

[6] Karl Knaus and C. C. Hearne, *Extension Supervisors, What They Do and How They Do It*, U.S.D.A. Extension Service Circular No. 409 (1943).

field staff and to provide assistance and material for the use of co-operative workers and leaders. Important work is done with such groups as health services, seedsmen, manufacturers, and dealers. Personal service is held to a minimum consistent with the need for being familiar with current conditions. He prepares the intricate findings of the research worker for use by the farmer, housewife, or 4-H Club member. He has an understanding born of intimate contact. He helps the county agents to execute in the field the policies and procedures of administrators and supervisors. In short, he is the key man who helps put science into practice.

The specialists at the Northwest Specialist Workshop held in Pullman, Washington, in October, 1947, said, "The specialist has one job in program development; that job is helping the agents. He can do this by assisting in obtaining background information on the community, county, state and national levels, helping in interpreting this information and acting as a consultant at program planning committee meetings."

The County Extension Agent's Role

The county extension agent's role in program building is that of organizer and teacher. He studies recommended procedures and determines with the advice of his sponsoring organization what committees are needed, how these will be appointed, what aids they will need, what the local people can contribute, what resources can be used, what working relationships must be established with other agencies, what phases of the program are of current interest and are important as against those which remain unchanged for the time being and require no immediate attention. To shift from the role of an organizer to that of a teacher is not always easy. Organization work usually requires an aggressive leadership, while teaching often demands patient and gentle direction in encouraging self-expression and action.

A home demonstration agent once wrote the state food specialist saying she had a group of young women who wanted to learn more about how to make cake. She pointed out that her nutrition program indicated a need for more vegetables and salads in the diet of her

people and asked what to do. The reply came back, "Teach them to make cake." For even though they probably should know more about cooking vegetables and making salads, it was time to meet their request with teaching at the point of interest, and hope for the interest in nutrition and vegetables, or what not, at a later time.

Does the county agent actually write the program? The answer is, "Yes, in part." Good programs are compilations of the findings of committees with figures, statements, and practices suggested from many sources. The agent gets as much of this done by others as he can, largely for the teaching value it affords. He must, however, finally edit, revise, or write the program to give it coherence and to apply the principles of program building.

The role of the county worker as an agent of the state and federal government is not stressed in program building. The object is to build an over-all program for the farm, home and community, not an agency program. The facts about situations, problems, and solutions in all fields should be laid before the local people in such a manner as to avoid their being associated with political ideologies or propaganda. Material aid may be obtained from other agricultural agencies both in getting facts and solving problems. Most certainly there is room for each group's contribution to public welfare, and operations of all groups should be integrated in a program that is built by the people.

The county extension agent helps leaders and people to analyze the situation, decide upon needed improvements, and determine what should be done. The development of a program for 4-H Clubs requires special procedures adapted to that age group.[7]

The Role of Community Committeemen

The role of community committeemen, local club officers, or unit leaders is to:

1. Develop a year-round interest in planning their own programs, observe and evaluate the results of their programs, gather local data, and actively serve during a stated period for which they are chosen.

[7] See *Organization of 4-H Club Work*, U.S.D.A. Miscellaneous Publication No. 320 (1948), p. 11.

2. Grow in their ability to analyze and recognize significant farm and home problems and pass judgment upon the solution.

3. Understand their job and that of the county organization as a permanent educational agency in which they are *true partners* with the State College and the United States Department of Agriculture.

4. Prepare for further work in executing the program with its many opportunities to represent the community, preside at meetings, act as project or club leaders, and arrange and carry out local details connected with meetings, demonstrations, etc.

Since people have an interest in doing the things they have helped plan, it is important that leaders of various segments of the community be utilized, such as businessmen, doctors, ministers, bankers, youth groups, and welfare workers. Such representatives of other interests are sometimes more outspoken or dominant in leadership or conversation; they should not overbalance the farm and home representatives. When such interests are to be brought into program building, it will be necessary to have several meetings since the variety of subject matter cannot be handled at one session.

Growth of Community Councils

As the number and type of organizations working in a small rural community increase, the competition for time and leaders becomes a problem. This was evident during World War II when the number of programs doubled almost overnight in many rural places, but it is a growing social trend in rural life. A county extension worker may not serve personally on any community council, but he should be familiar with their set-up and purposes so that he may (1) make certain extension work is represented on any community council which may be formed in the county, (2) advise or help local council members in planning regardless of what organization they may represent, and (3) utilize community councils as an aid in coordinating programs at the community level.

In defining a community council,[8] Professor Robert A. Polson of the Department of Rural Sociology at Cornell has said:

[8] See also U.S.D.A. Extension Service Circular No. 403 (March, 1943); and Dwight Sanderson and Robert A. Polson, *Rural Community Organization* (New York: John Wiley & Sons, Inc., 1939), Chs. VI–IX.

A community council is a body of responsible citizens representing the organizations, agencies and major interests of the community. It is open to every community group on a non-profit, non-partisan, voluntary basis and organized so it is representative of both the farm and village interests of the locality. A typical council has a membership which is sixty per cent organization and agency officers, twenty per cent professional men and women, and twenty per cent outstanding local citizens, not included in the previous two categories, who are elected by the council as members-at-large.

A council provides a clearing-house to aid local leaders. It functions to call together representative leaders to plan action on community-wide problems and to delegate the execution of these plans to the appropriate organizations. It creates a cooperative community team of otherwise independently operating agencies. It helps avoid waste effort and encourages orderly and efficient promotion of the community's work. A council may advise organizations and individuals advocating certain projects when asked or it may organize community-wide committees to carry on special tasks.

Individual Farm and Home Planning

Extension programs in individual farm and home planning currently are among the most advanced developments with great possibilities for the future. When farm people begin thinking with their county agents in terms of their farm as a whole, when they begin planning integration of all practices and farm operations with the home and family living, then they have grown to a level which is very much higher than that of the days when extension work was in the pioneering stage. We operated then largely on a project basis. We helped folks wrestle first with this problem, then with another, and still another. One year we carried on a campaign to increase alfalfa acreage; another year a campaign for cow testing. But most work was strictly on the project basis. It is but natural that farm people who have always found the Extension Service ready to give scientific and technical help in solving individual problems should now come to the Extension Service for help in the major problem of thinking through the organization and operation of a particular farm and home for one, two and three years ahead.[9]

[9] M. L. Wilson, "An Effective Extension Service for the Future" (speech before the Association of Land Grant Colleges and Universities, at Chicago, Ill., December 16, 1946).

Individual farm and home planning is a way of doing extension work. It coordinates the services of other state and federal agencies with which the farmer and his family works. Through this process a farm family is assisted by the Extension Service to build a family program. The family decides upon objectives for the next three to five years. These objectives may be in terms of their desires for their children, for their home, or for their farm. The present farm and home situation is reviewed to find conditions which can be improved. Using the information concerning improved methods which is available through the Extension Service a revised plan for operating the farm and home is prepared and put into use. This revised plan is called, in some states, a balanced-farming plan. The following factors should be in balance:

1. Enough income possible to meet the objectives of the family.
2. High acre yields, quality crops, and soil resources maintained.
3. Well-balanced crop rotation systems to provide adequate pasture and roughage, and such grain as the farm is suited to produce.
4. A field layout which suits the farm and makes possible the use of recommended practices.
5. A water-management system designed for the entire farm and home needs.
6. Management practices that utilize most profitably the production of the farm.
7. Efficient use of labor, power, machinery, woodland, wildlife, and other resources.
8. The convenience, comfort, and well-being of the family.
9. Wise use of own or borrowed capital to put the approved practices into operation to best advantage.
10. Sufficient financial records to keep all operations on a sound, businesslike basis.

Through this method of doing extension work farm families have been able to use the practices recommended by the Extension Service which fit the family and farm situation to improve living, production, income, and farm worth. The Extension Service has thus been able to get improvements adopted faster than it would have

done by promoting specific practices not necessarily related to the whole of farm life.

The Extension Service, generally through committees of staff members, prepares reference books and forms to assist families with this planning. Help is given the family also in obtaining technical aid and materials to carry out the family program. The resources of a community, such as credit agencies, dealers, or contractors, are mobilized to make it possible for the family to carry out the operation.

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CHAPTER XIII

Public Problems and Rural Policy

YEARS of experience with current and long-time program building have taught both rural people and extension workers that (1) the solution of many rural problems lies beyond their line fences and their communities, (2) public problems of a complex nature affecting rural welfare have expanded their area of interest and educational responsibility, (3) for public problems there is often no single or simple solution, (4) choosing alternative solutions requires judgment and understanding as well as knowledge of facts, and (5) building a program and executing it are constantly affected by policy. The term "policy" means a settled, definite course adopted and followed by any group or body. Many unwritten policies are used in forming judgments daily on farms and in public service. Whether such policy is recognized and stated or written determines the degree and accuracy of its influence. Since the passage of the Smith-Lever Act in 1914 the Extension Service has experienced a steady growth in the scope of its program building. The more it became involved in public problems the more it was evident that somewhere, somehow, rural policy should be considered systematically on a coordinated basis by all persons and agencies interested.

For a good many years the program-planning committees of the Extension Service which have dealt with permanent aspects of rural life have touched upon public problems, and in recent years they have done something in the nature of forming rural policy. These aspects of the work have necessarily moved slowly, partly because of

the more pressing recognition of needs closer home, and partly because of lack of personnel to prepare and handle the subject matter. The work of these committees did much toward speeding up adjustments that were needed in agriculture. Such adjustments would have come eventually as the result of economic starvation and the law of the survival of the fittest. By having the facts available, however, and by establishing definite policies, the time and cost of bringing about the adjustments was greatly reduced. The work of studying the facts and developing policies that was done by these planning committees is the same as done by rural policy committees (see Chapter XI).

An Example of Early Rural Policy Committee Work [1]

In the early 1920's farm people in Seneca County, New York, were faced with a serious economic problem. For generations they had been buying and paying for farms by selling timothy hay. The price of this important cash crop had been steadily declining. The consequent drop in farm incomes was being reflected in the personal standards of living of rural people and in the public financial support available for roads, schools, county extension work, and churches.

The situation in Seneca County was typical of many others in which a drastic reduction in income occurs. The farmer blamed the hay dealer for not paying higher prices. The dealer blamed the railroads for high freight rates. The Republicans blamed the Democrats for a low tariff on hay. The Democrats blamed the College of Agriculture for showing the farmers how to grow alfalfa and for making a hay surplus. The schoolteacher blamed the middleman, and the minister blamed the automobile. So one group of farmers wanted all producers to hold out for a higher price for hay. The dealer wanted legislation to lower freight rates, and the Republicans wanted it to raise the tariff. The Democrats wanted to eliminate the Extension Service, the schoolteacher to organize a hay co-op, and the minister

[1] Much of the material in this chapter is from a mimeographed statement by Professor V. B. Hart of the Department of Agricultural Economics, New York State College of Agriculture at Cornell University, dated March, 1946.

prayed for the invention of a hay-burning auto and a new roof on the parsonage.

The Seneca County farm people did not lack brains, but they did lack facts. Finally in 1926 the Seneca County Farm Bureau appointed a group of farmers, called the Seneca County Agricultural Conference Committee, to find out what was the matter with the agriculture of Seneca County. This committee made a careful study of the facts and came to the conclusion that the real reason for the low price of timothy hay was the decline in the number of horses in cities. They also decided that this decline was permanent and that the typical hay-and-grain system of farming in Seneca County could not be expected to provide a decent living for the average farm family. In its report to the people of Seneca County the Conference Committee said:

> Over a long period of time, farm practices become adapted to local conditions. When conditions change, desirable adjustments in practices are made slowly. This lag in adjustment is due to habit and to the fact that farmers are not sure as to the permanency of the changes.
>
> Because of its favorable soil, climate and markets, hay and grain have long been important farm products of Seneca County. With changed conditions the demand for hay has diminished and promises to continue to do so. In spite of this change, many people have continued to produce hay and grain hoping that present unfavorable conditions might prove to be temporary.
>
> The changes that any farmer should make to bring his farm business into correct adjustment to conditions of the present and the future depends on the soil and location of the farm as well as on many personal factors. The following program aims to present facts and recommendations that should be considered. Educational work, based on these recommendations, carried on by the Farm Bureau, with the backing of the several organizations and groups represented by this Committee, should be helpful in speeding up the necessary changes and in reducing losses.

The report on needed long-time adjustments in the agriculture of Seneca County included definite policies with regard to shifting the types of farming from timothy hay and grain to more dairy and other livestock. Policies concerning increasing the amount of legume hay

grown, concerning pasture improvement, drainage, introduction and production of cash crops other than hay, and reforestation of areas not adapted to any type of farming were also included in the report. The Seneca County Agricultural Conference Committee did not embark upon an action program. Rather, it presented policies which served as guides to the Extension Service, the Farm Bureau, the Grange, the County Board of Supervisors, and other agencies in conducting their programs.

Land-Use Planning Committees

Because of the need for coordinating the activities of the extension agents and of all the various local agents of the U.S. Department of Agriculture which had been created by the summer of 1938, and as a means of enlisting farmers in an intelligent study of programs for the development of agriculture, there was organized a system of county and state Land-Use Planning Committees. This work grew out of the so-called Mount Weather Agreement between the land-grant colleges and the U.S. Department of Agriculture (July 8, 1938). The objectives as stated were:

> The Department feels the need for reasonably uniform procedures whereby farmers may take responsibility for the development of sound land-use plans, programs, and policies for the dual purpose of (a) correlating current action programs to achieve stability of farm income and farm resources, and (b) helping determine and guide the longer-time public efforts toward these ends. In order to function effectively and democratically in the national field, these procedures must provide for the analysis, planning, and program building beginning in the communities and extending then to county, state, and national levels.

This plan provided for the creation of state and county committees, composed of farm people and personnel of the various services of the U.S. Department of Agriculture, with the county extension agent usually acting as nonvoting secretary. The director of extension was generally the chairman of the State Land-Use Planning Committee. The work of these committees started off with an ambitious program including the assignment of specialists to work on a regional basis. Funds were cut off, however, and the work could

not proceed as planned. The concept remained in the minds of extension workers and others. Coordination in the work on public problems and the formation of rural policy continued in a less uniform system.

Postwar Agricultural Policy

In 1943 the Association of Land-Grant Colleges and Universities created a special committee on Postwar Agricultural Policy. It was designed to work on problems of regional and national scope, such as agricultural prices, land tenure, conservation, rural living, and social facilities. Its published report [2] should be in the hands of every worker who has responsibility in the field. We quote only to give an example of what the committee called "basic economic considerations."

> Before proceeding with a more detailed analysis of farm problems and policies, we need to emphasize four basic characteristics of agriculture which can be observed historically in most countries of the world, and which must be taken into account in any realistic policy-making:
>
> First, in a progressive economy the needed foods and fibers can be produced by a decreasing proportion of the total population.
>
> Second, the farm population more than reproduces itself, while the urban population fails to maintain its own numbers.
>
> Third, a period of economic depression not only interrupts but reverses the normal flow of population from the farm to the city.
>
> Fourth, there is a constant tendency for advantages such as accrue from higher farm prices and farm incomes to be capitalized into higher farm land values rather than to be used primarily for improving the level of living of farm people.

This report ends with a plea that the programs and policies adopted actually are those which reflect the needs and wishes of local people with more coordination and less wasteful duplication. As a remedy it suggests national, state, and county policy-forming committees.

The function of such committees is not to determine what agri-

[2] *Postwar Agricultural Policy*, Assoc. of Land-Grant Colleges and Universities, Report of Committee (Noble Clark, chairman), Oct. 25, 1944.

cultural policies shall be adopted, but to supply essential facts and make recommendations after careful analysis with the public interest as the first consideration. It is the responsibility of the nation's

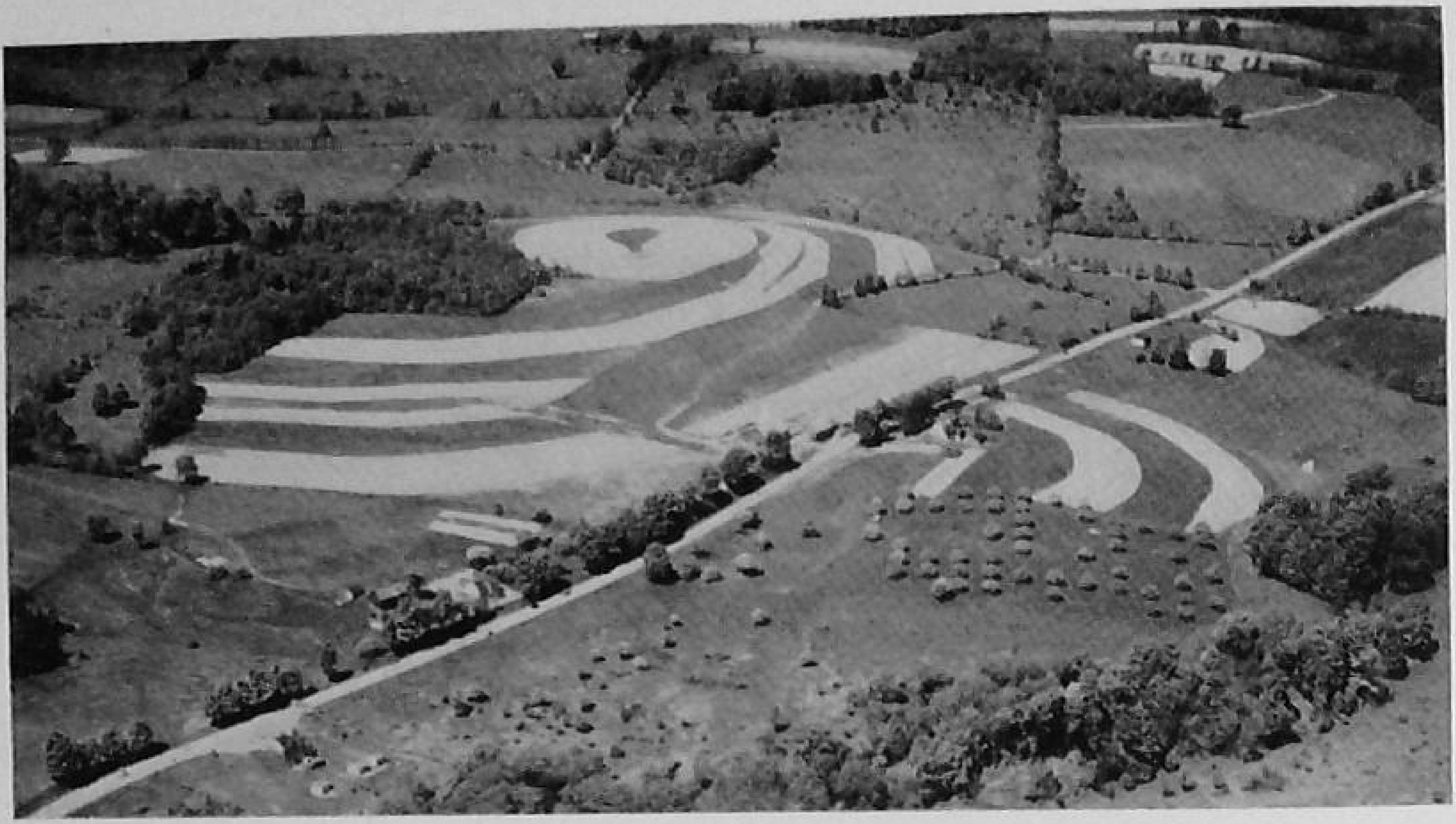

Figure 17. Erosion control measures on individual farms are part of the larger public problem of flood control, abandoned lands, and highway maintenance. These require the cooperation of individuals with public agencies.

citizens, acting through their various economic, social and political organizations, to make this determination by activating such policies.

(For rural policy applicable to boys' and girls' club work, see Chapter X and especially "the ten guideposts.")

Scope of Extension's Responsibility

Following World War II the Extension Service of the U.S. Department of Agriculture felt the need for delineation of the scope of its responsibility in the broad field of public problems and education. A committee was set up to study the matter. It reported that in the years ahead American farmers must face many issues and participate in making numerous decisions of an economic and public policy nature that markedly affect their own welfare as well as that of the entire nation. Choice of alternative courses must be made. Ability to meet these issues properly depends to a large extent upon understanding the basic facts.

Although the committee's report[3] was intended primarily for extension workers, it is a valuable document for any group interested in an appraisal of the various major problem areas and a well-balanced program of educational service. Not all public problems can be dealt with effectively at once. The principle of "balance with emphasis" must be applied. In its summary the committee said, in part: "Maximum increase in emphasis is needed in the fields of (a) economic problems and public policies; (b) marketing and distribution; (c) certain segments of the field of social relations, adjustments, and cultural values; (d) farm homes and buildings; and (e) health, particularly with respect to developing a better understanding of the total rural health situation and methods of improvement through group action."

Some Difficulties

Human progress results from the willingness and daring of leaders to think, to reason, and to follow where that thinking and reasoning lead. As farmers want to know more about the world in which they live, many of the problems will lead to controversy. Sometimes this is due to fallacies and often to a matter of judgment as to which of two courses of action is wise. There may be some who do not believe that consideration of broader problems of public policy, of inter-group relations, of international relations, of peace or war, of tariff or no tariff, belongs within the field of agricultural extension. Since most of our efforts are toward the same goal of improved living, it follows that everything which affects these goals must fall within the educational program. The difficulties confronting farm people are increasing as the situations they face become more complex.

Examples of some public questions of special concern to farm people are: What is the relation of real-estate taxes to income and other taxes? Where does the tax dollar of various governmental subdivisions go? Is the farmer interested in whether high wage rates are bought at the cost of heavy unemployment? Are domestic price programs separate and distinct from world relationships and responsi-

[3] *Report of the Committee on the Scope of Extension's Educational Responsibility* (P. V. Kepner, chairman), U.S.D.A., mimeographed, FA-1255 (January, 1946).

bilities in regard to prices? Can the government maintain a hands-off price policy at home and at the same time play an active part in disposing of export surpluses? Many other questions could be mentioned, for example, those concerning highways, schools, sociology, fire protection, health, flood control, marketing, conservation, etc. Shall the rural people be served in all their needs except this one of getting information about important issues and thus be left to get it from the outbursts of pressure groups, from political platforms, or from hearsay? To whom shall the public turn for unbiased and reliable facts? If the Extension Service waits until all problems become highly controversial or until proposed legislation makes them immediate political issues, then there is little it can do. But if it faces these matters squarely, in the best interest of general welfare, it will do the rural people as well as the public a great service. An expanded educational program is demanded. The practical limitations of such work in the counties depends almost entirely on the kind of assistance county extension workers can get from the land-grant college.

What Is a County Rural Policy Committee?

A county rural policy committee is a group of practical and experienced farmers, homemakers, and others interested in rural affairs. The job of the committee is to study the economic and social problems of the farm and rural people in the county and to propose policies which will serve as a guide to individuals, organizations, and agencies in making needed adjustments and planning their programs.

A county rural policy committee is a policy-making rather than an action committee. For example, a county rural policy committee might investigate the condition of health of farm boys and girls and recommend the establishment of certain additional medical and dental facilities and personnel in rural areas. The committee would not, however, engage in raising any funds for establishing additional public or private clinics or hospitals or additional doctors or dentists to work in rural areas. In a similar way, a county rural policy committee in a county where there is no soil conservation district might make a study of what a soil conservation district could or could not

do for the county and go on record as to whether, in the opinion of the committee, there is need for a district in the county.

In the case of the medical and dental problem and the soil conservation problem, the county rural policy committee might outline some of the steps it feels should be taken to prepare the county for the establishment of better medical and dental service or for a soil conservation district. Such steps might include educational programs for school boards, Parent Teachers Associations, and farm and home organizations. The rural policy committee as such would not, however, engage in putting these suggested programs in effect although individual members of the rural policy committee might be concerned with such action programs through their connections with other committees or groups.

Why Do We Need Rural Policy Committees?

There is a need in every state and county for a group of practical and experienced men and women to study the present and future problems of agriculture and rural life and to suggest, if not establish, sound policies for meeting these problems. Unless some competent group is prepared with sound policies for handling agricultural and rural problems, many mistakes will be made by agencies, organizations, and individuals, or much time will be lost in bringing about needed adjustments, or both. The job of a state or county rural policy committee is to recommend policies that will avoid those mistakes and speed the making of adjustments.

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CHAPTER XIV

Procedures in Program Building

PROCEDURES that have to do with the development of a program are concerned chiefly with problems, solutions, and objectives, whereas procedures in making the plan of work have to do mainly with methods. To put it another way—the first five principles of program building refer to content and the last five refer mostly to teaching methods, plans, and processes. We shall in this chapter speak briefly of the procedures that affect the program content. Plans of work will be discussed in Chapter XV.

Assembling Material

We may assume that the national Extension Service will do those things which the state Extension Service cannot do readily, and the state service does those things which the county service cannot do easily. The facts, such as outlook material, must be prepared by the federal service in such a way as to be most useful to the state, and state figures must be set up so as to be of most use to the counties. In each case, only pertinent material should be used. The arrangement of data is important. Too many figures and too much detail hamper the judgment of people who are trying to arrive at an over-all view. Most people understand graphs when they are well presented. Column charts and pie charts are useful. Maps with large figures or colors show locations and other factors. All kinds of audio-visual aids may be used. The skill with which important trends and basic considerations are presented largely determines the value of conclusions drawn by the committees which are expected to use them.

Farm and home data gathered with the help of local people will get a good reception when the summary is presented. The subject will provoke a lively and intelligent discussion. Mimeographed and printed material should be placed in the hands of persons who are to serve on subcommittees. Pencils and paper should be at hand.

How to Write Programs

Divide and conquer is the principle to follow in writing programs. Writing is the function of one hand. A secretary may be chosen to do the writing and several persons may dictate or propose wording as the document grows. Agents will avoid doing this themselves in committee meetings if others can be found to serve—they will have enough editing and writing to do outside. At first the discussion in a committee seems confused and rambling. The secretary should then try to get the high points of this discussion for reference. The chairman should work closely with a secretary to get in written form (1) the main or basic facts and information that are accepted, and (2) a statement of problems to which there is general agreement. These may be isolated by a showing of hands to bring the matter to a conclusion. If there is agreement that a problem exists, though the facts presented do not adequately show its existence, the chairman may arrange to have more information or specific facts obtained for the record. The agent's time is best spent in helping to word the final phrases without actually doing the writing. He may suggest the wording of a solution or an objective.

Problems should be stated from the standpoint of the farm, the home, and the community. The notes a committee secretary turns in are valuable according to the talents of the individual. In the final program, the editing should never leave such phrases as—"to teach farmers to, etc.," or "to get homemakers to adopt, etc." This puts the matter as if it were the personal program of the agent. In reality the farmer's problem and that of his family is "to manage, to learn how, to increase yields," etc.

If you write out a problem such as "to increase the size of the farm business," then look back at the facts you have presented to see if they support the problem. Perhaps what you have given are some

figures on the low production per cow or the low prices of farm products. What you need are figures showing the size of an average or a good farm business and that the local farms are below this size. "Size" may be measured in the local terms covering number of acres, number of cows, or dollar income.

Never state the problem in terms of the solution. For example, rather than "to get more vegetables in the diet," the real problem is probably "to change the family food habits," and the solution may be "by interesting the family in planting a home garden," by teaching how to cook vegetables, or perhaps by working with merchants to help make available something besides rice and beans on a competitive price basis. An accurate statement of what the problem really is comes from facing all the facts without undue influence from an idea somebody had before all the facts were available.

Stating Solutions and Objectives

We need now to make clear what teachings or practices we offer as solutions to the problems found. In some states this is called available subject matter. Agents are warned not to offer help to the public on problems of which no adequate or practical solution is available. We don't know all the answers.

The more progressive and highly specialized producers are apt to bring up questions which cannot be answered immediately. Ordinarily the problem is one for which the specialist and the agent have some answer. Although the solution, recommendation, or teaching will vary with different situations, and although there are many exceptions, it is essential to be concise and clear. For example, six points to increase fall milk production would be:

1. Keep cows and heifers full of good roughage this summer.
2. Plan to store some of the best hay for fall feeding.
3. Feed grain as liberally as possible in summer and fall.
4. Plan to stable the herd before bad weather next fall.
5. Save milk by using a calf starter.
6. Breed for more fall-freshening cows.

Good teaching, like good advertising, is prepared so that "he who

runs may read." Another example would be the "Seven Steps" for a campaign to get more electricity on the farm:

1. Apply to your local electric utility company for current.
2. Ask the utility company for a written notice to start wiring.
3. Ask the utility company for a wiring layout.
4. Get wiremen's bids on all or part of the wiring indicated in the layout.
5. Require the wiremen to furnish a Fire Underwriters' Certificate.
6. Ask the Underwriters' inspector to check the completed job against the wiring layout.
7. Keep in touch with your town or county farm light and power committee.

These "Seven Steps" caused a lot of interest and furnished the basis for some lively discussions. "Why ask the company for notice to start wiring?" "What is a 'layout'?" "Who are the Underwriters?" These and many other questions had to be answered at meetings and by news and postal service. They served as a way of getting and holding interest. Almost every farm which was in the process of getting electricity was at some stage of the development represented by these steps.

Not all problems result in organized educational campaigns which need a series of teachings. Many problems have one simple answer. Others may require some new organization or a change of one already in existence. For the extension worker and the public it is important to get the answers worded in a manner that cannot be misunderstood.

Procedures with Committees

We have already described the committees needed and the role of different persons. This is about as far as we can go without dealing with actual procedures in each state. To deal in averages or vague generalities would be to describe something which does not actually exist anywhere. A few rather simple procedures can be suggested. For example, at the community level where everyone knows everybody else intimately, the meeting should be very informal; it might well

be held in a home or small public room. The persons present should be told who was invited. This gives them a chance to realize that each one must take an active part. The chairman should be a local person. He or she might open the meeting with a statement somewhat as follows:

> We are called together to discuss our local situation. We need to find out if we have any common problems vitally affecting our community, which are capable of solution through organized effort. As citizens of this community you represent several different organizations and many interests. We should approach our work with a desire to coordinate what we do with that which is being done or might be done further by all groups in the community. We should use all our resources. Some of you have been gathering facts about our local situation. There is also some economic outlook material from the U.S. Department of Agriculture and our state college. I should like to have our county extension agents present some of this material now. After they have done so, we shall discuss the situation and see if we can agree on the most important problems. It may require another meeting to find solutions for them as part of a sound program.

If the extension worker is not present, the remarks of the chairman might be varied with these words:

> Since our county extension agents could not be with us at this meeting, I should like to give you some of the material presented at the recent regional [or county] meeting which I attended. I do not pretend to be an expert in these matters. The mimeographed material we have is clear enough so that we can discuss it together profitably before trying to make our own statement of problems and solutions.

Whether this whole program procedure starts in the communities and goes up to the county level or starts with county or regional conferences which go back to the communities, varies in different places.

In working with county program committees there is no one way to do the job, but there are four ways in which many counties fail to do their best:

1. Too little time is taken for planning.
2. Local data as a basis for problem determinations are insufficient.

3. There is lack of effective participation by farmers and homemakers.

4. There is lack of coordinated approach.

The following is an example of need for a coordinated approach. A nutrition program must consider prevailing health and disease situations and the ability of people to grow and procure recommended foods. On many of our small farms, to have the farm produce milk, eggs, and meat would require changes in the size of the farm to provide enough space. Besides that, there would be the problems of refrigeration and of developing more frozen-food lockers. So, in planning this type of program we need to bring together the medical people, the farm-management people, the frozen-food specialists, the agronomy, livestock, dairy, and poultry specialists, as well as the nutrition specialists, the home demonstration agents and their supervisors, and 4-H leaders, to study available facts, get additional ones, and develop a nutritional program which can be put into effect by large numbers of people. A special effort to improve each year one of the varied phases of the problem will eventually show good results.

How to Improve Procedure

It is possible to find the weak spots in any program-planning procedure. The first five principles of program building can be applied to a county program as criteria, and each can be rated as "good," "fair," or "poor."

CRITERIA FOR JUDGING PROGRAM-PLANNING PROCEDURE

	Good	*Fair*	*Poor*
1. Based on analysis of facts:			
National outlook and facts (from U.S.D.A.)			
State research and surveys (from Colleges)			
Farm, home, and community surveys and facts (from people)			
2. Problems based on needs:			
Program meets needs and interests of local people			
Program coordinates whole family needs			
Cultural and community differences considered			

CRITERIA FOR JUDGING PROCEDURE (*cont.*)

	Good	Fair	Poor
3. Objectives and solutions offer satisfaction:			
Objectives are well defined			
Solutions are practicable, economical			
Solutions will result in satisfaction and learning			
4. Permanence with flexibility:			
Is forward-looking			
Follows wise, long-term policies			
Is capable of change in emergencies			
5. Balance with emphasis:			
Is comprehensive socially and economically			
Is comprehensive as to ages and areas			
Emphasizes a few important needs			

Illustration of Program Planning Procedure

In the previous chapters we have tried to set forth principles and basic organization. These are essential but general. Because the actual procedure varies so much in each state and changes from year to year, we feel that such material should be obtained from each state as issued. But the reader has a right to know how the planning is actually done. What follows is likely to be out-of-date as compared to material issued currently; it is only illustrative.

BUILDING COUNTY EXTENSION PROGRAMS IN IOWA [1]

Building county extension programs is a cooperative effort between the local people and the Extension Service of the Iowa State College. The work in each county is carried on in cooperation with a farm aid association, an organization incorporated under the laws of the state specifically for this purpose, the affairs of which are managed by a board of directors elected by the membership at the annual meeting.

The Extension Program Development Committee:

A number of committees are appointed by the county board of directors to assist with its work. One of these committees is the extension program development committee. It consists of from six to nine members—farm men and women who are selected because of their broad interest in educational work and because they represent as nearly as possible a cross section of the farming people of the county.

[1] This material was furnished by Iowa State College, December, 1948.

The committee has two major responsibilities:

1. Mapping the annual educational program which is submitted to the board of directors for approval. This covers the program year, October 1 to September 30.

2. Studying the effectiveness of the educational program and making suggestions for changes throughout the year as the occasion may demand.

How the County Extension Program of Work Is Developed:

The county committee meets early in the year to review progress being made with the program for the current year and to start giving consideration to plans for the coming year. Rural needs in terms of problems affecting the farm family are discussed. This is sometimes done by listing the problems on a blackboard under four headings:

1. Problems affecting agricultural production.
2. Problems affecting farm family living.
3. Problems concerning rural youth.
4. Problems confronting rural communities.

Problems or needs may be similar from one year to another, but they will vary in importance from year to year. Clarifying the problems is one of the most difficult things a committee has to do. It is not always safe for the members to depend on their own information and impressions. Several methods of deciding on the problems are used:

1. Making observations by talking to community leaders, by leading discussions at meetings or doing personal investigation work. In one county the committee made a tour to observe soil losses and demonstration work.

2. Using questionnaires. These are usually of two types: (a) One includes a list of educational activities. The recipients are asked to check those activities they feel are most important. A compilation of the returns gives interests of farm people which may be an indication of rural needs. (b) The second kind of questionnaire is the "leading question" type. These leading questions usually relate to problems the county committee has been discussing. The questionnaire provides additional space for the recipients to write in comments and include other problems than those raised.

It is suggested that questionnaire forms be sent to extension cooperators in case a general distribution is not deemed advisable. A summary of information received from the cooperators should give an excellent indication of the thinking of farm people on educational needs.

3. Securing a cross section of farmer thinking through personal inter-

views, selecting the farms so that they are representative of the county.

4. Making use of material prepared annually by the Extension Service. This usually includes a description of Iowa's rural situation by types of farming areas, and outlook and other background information based partly on research work.

Program planning is a two-way proposition, the college assisting the counties and in return the counties assisting with Extension Service plans. County extension directors, home economists, and youth agents assist county committees.[2] Sometimes extension supervisors and specialists assist. *Complete minutes should be kept of all meetings of the committee.* This record will become increasingly important as a guide to future committees.

It will be impossible for any county to do educational work each year on all problems that the committee may list. Consequently, the next task of the committee is to determine which problems should receive major attention. Around these problems is built one educational program of interest to all members of the family. For instance, the committee may feel that the loss of topsoil due to erosion and poor farming methods is a problem which should be treated in a major way in the educational program, and also it might decide that some problem affecting the health of rural people should receive major attention. All members of the family will participate through their own organized activities.

Special Educational Committees:

Working in conjunction with the extension program development committee are a number of special committees, such as one on family living, boys' 4-H Club work, and girls' 4-H Club work, which are common to all counties. A number of agricultural committees are also used, such as soil conservation, livestock production, crop production, marketing, etc. The number and character of these agricultural committees varies with the work in the counties.

The function of these special committees is:

1. To receive from the county extension program development committee problem assignments, suggestions, recommendations, and requests.

[2] In Iowa the county agricultural agent is the "county extension director." The home demonstration agent is the "county extension home economist" and the club agent is the "county extension youth assistant."

2. To review these problem assignments and work out plans to meet them.

3. To make a report to the county committee.

4. To decide on details for the activities they are in charge of and to assist in carrying them out.

5. To act in an advisory capacity to the county committee.

Putting the Special Committees to Work:

A statement of the problems discussed by the county committee is prepared and sent to the chairmen of all special committees with the request that they call meetings of their committees. If there is no special committee that is set up to deal with some particular problem, it will be necessary to provide for one.

At the special committee meetings the report of the county program development committee is read, or it is presented by one of the county extension workers. Recommendations are developed for an educational program that will be suitable for the county to attempt as solution for the problems under consideration. A special committee *will not* necessarily make recommendations on all problems that the county committee has discussed. Also, *it may be* that it will point out other problems which the county committee did not include. A special committee *may* recommend other activities that should be included in the program in addition to those that relate to rural problems under consideration.

This brings up the question of major and minor activities. Every county committee is concerned that major attention be given to the problems it feels are most important. However, it is recognized that any well-rounded program will include activities which do not relate to major problems. For instance, honey production may not be a major production activity in a county, but if there is a group of beekeepers asking for educational assistance, some provision is usually made for it in the program of work. County extension directors, home economists, and youth assistants help the special committees. Frequently supervisors and specialists are called in for advice.

Recommendations of the special committees are presented to the county committee. This is done in writing or by chairmen of these committees meeting with the county committee to give their reports and to assist in coordinating the different special committee reports into a well-rounded county extension program.

Final Preparation of a Statement of the County Extension Program of Work:

There is a suggested form for writing up the educational program. Problems are listed in one column, classifying them according to four major headings, namely: Production and Marketing, Farm Family Living, Community and Public Problems, and Youth. Opposite these problems, statements are given on each pertaining to solutions, methods, calendar of activities, and cooperating groups (see page 175).

The extent to which details are included in the final program statements has a great deal to do with how well it is received and how much work is done later. A committee may list the loss of hogs due to disease as a major problem and include as the solution the conducting of a sanitation campaign without giving any details. *The program should not be so general that one has to draw greatly on his imagination for what is intended.*

In one county a unique system was used to pull together the special committee reports by putting large pieces of white paper on the wall and listing the problems on them. The proposals of the different special committees with respect to these problems were also listed as well as other activities which the special committees were recommending.

Through this method the program committee got a complete picture of the special committee reports and was able to coordinate them into a well-rounded educational program for the county. It was necessary to eliminate some recommendations in order to avoid too large a program, which might result in directing attention away from major problems.

Presenting the Extension Program of Work to the County Board of Directors:

The proposed program is presented to the board of directors by the chairman of the committee. It is presented not later than the time of the August board meeting. This allows time to make changes which may involve new arrangements with the State Extension Service for specialist and other help. Each member of the board of directors has a copy of the committee's report for his reference. The report is formally approved by the board of directors and made a part of the minutes of the meeting at which it was approved.

Distribution of the Extension Program:

After the adoption of the committee's report by the board of directors, it is mimeographed, including the names of the members of the program development committee and of the special committees that assisted. Copies of the program are sent to a list of agricultural and professional leaders of the county. This might well include the members of: (a) county board of directors, (b) county program committee, (c) special committees, (d) board of supervisors (county government), (e) other agricultural leaders or professional people who are cooperating, (f) extension cooperators. Copies of the program are sent to the Extension Service of Iowa State College.

News articles summarizing the approved program are usually prepared for release to the press. At the annual meeting of the members of the county organization the chairman of the program development committee is called upon to give the highlights of the coming year's program. In case a printed summary of the year's activities is prepared for distribution at the annual meeting, a statement of the program of work for the coming year is included.

Putting the Program into Execution:

The responsibility for carrying out the program of work rests with the board of directors. Special committees work out further details for those parts of the program for which they are directly responsible. This includes such items as number of demonstrations, individual and county 4-H goals, circular letters to be used, etc.

The county extension program development committee is largely concerned with planning the over-all educational program. However, during the year proposals will come for changes and additions to the program. If the proposals are major ones, they should be taken up first with the county committee. This practice has been followed particularly with proposals coming from the State Extension Service for various food production and preservation campaigns. The committee needs to meet periodically throughout the year if it is to do its work in a satisfactory manner.

After the program of work has been approved, arrangements are made with the State Extension Service for the necessary specialist and other help. This is usually done through consultation between county extension workers, the supervisory staff, and specialists.

Extension cooperators (school district cooperators) should be used as a medium to publicize and carry through parts of the program. Special timely letters might be sent to the cooperators giving advance information regarding major phases of the program. The cooperators may also be used to disseminate information in regard to special situations and to call the attention of neighbors to meetings planned for their communities. Also, they can be used to secure necessary information as previously suggested. Farm men and women are used to lead local discussion groups, to act as demonstrators of good practices, and to serve as leaders in youth activities.

The State Extension Program Board:

The Extension Service of Iowa State College endeavors to base its plans on the needs of the counties as expressed in their programs of work. Its program board consists of representatives of the administrative, supervisory, specialist, and county extension groups, and has as its advisory group a farmer and a farm woman from each of nine districts in the state. These people are selected from a group of nominees submitted by the county extension workers in their district conference sessions. The members of the advisory committee are appointed annually by the director of the Extension Service. The members of the advisory group reflect the needs of the counties in their sections of the state and help guide the state program board in its decisions.

The reader may judge for himself how well this procedure as used in Iowa exemplifies the ten principles of program building set forth in Chapter XI. Factual information about the situation is presented fully as a basis for selecting the problems. The form on the opposite page is easy to follow; it may be supplemented by written information when distributed for general use. The use of a form to help a committee prepare a report has several advantages: (1) it shows specifically what kinds of decisions the group must make; (2) unfilled blank spaces on the form are mute reminders of incompleted work; (3) it helps convert the plans into action by showing the steps to be taken; (4) it reduces the amount of writing needed; and (5) it puts the program and plans in shape to enable easy summary and coordination with other similar or related programs.

SUGGESTED FORM FOR COUNTY EXTENSION PROGRAMS IN IOWA

1. Production and Marketing

Problems	*Solutions*	*Methods*	*Calendar*	*Cooperating Groups*
A. Farm Operation 1. Less than 5% of the farmers are following recommended practices of erosion and gully control.	Contour farming Grassed waterways Terracing	Soil Conservation discussions with visual aids at township, boys' 4-H, and other meetings	Winter months June—Soil Conservation week	Women's Groups, AAA, Smith-Hughes depts., Luncheon clubs
		Publicity	Throughout the year. June—Soil Conservation week	AAA, Press
		10 demonstrations on laying out contour and terrace lines	April	Extension specialist Extension cooperators
		Exhibit at county fair	August	Extension specialist
2. Swine diseases are reducing production and profit.	Sanitation Immunization	2 vaccination schools	Winter and spring months	Extension specialist
		3 swine disease meetings	February	Extension specialist
		Contests	Spring and summer	Boys' 4-H clubs Iowa Master Swine Producers
		4 housing meetings	January	Extension specialist
		Publicity	Throughout the year	Press

Other Suggestions

1. Problems should be listed under four main headings: Production and Marketing, Family Living, Youth, Community and Public Problems. List only those problems and solutions on which work will be done.

2. Mimeograph sufficient copies of the program, after it has been approved, for distribution to Extension Cooperators and Organization Leaders.

3. Prepare an appropriate cover for the program. Include the names of the members of the Program Planning Committee and the Special Committees on the inside of the cover.

4. Introduce the county program with a statement of over-all objectives which the committee has agreed upon.

The following outline from the U.S. Department of Agriculture may be used to make a work-chart as an aid in program planning. The purpose is to help in considering how best to modify existing procedures to meet desirable standards. Not all the steps will be taken in any one county.

COUNTY (LONG-TIME) PROGRAM-PLANNING PROCEDURE *

(To be repeated, once every 5 to 10 years, depending on county situations)
By M. C. Wilson, in Charge, Extension Studies and Teaching, and Mary A. Rokahr, Extension Economist, Home Management, U.S. Department of Agriculture

A suggested logical procedure	†
A. *Preparatory work by state and county extension staff:* 1. Conference of state and county staff (may be annual conference): a. To agree on program planning objectives. b. To outline general approach and procedure to be followed.	
2. Supervisors and county extension agents: a. Review status of program planning in individual county. b. Consider background information needed in county agricultural and home situations, past extension programs, etc. c. Discuss detailed procedure most practicable for county.	
3. Assembling and analyzing available pertinent information of factual nature by extension specialists and research staff. a. State as a whole. b. Individual counties.	
4. Assembling of background information relating to agriculture and home situations in county by county extension agents.	

* Prepared for use by extension workers in attendance at summer session course relating to extension organization, programs, and projects (see *Criteria for Judging Program-Planning Procedure*).

† Use spaces to indicate the modification of present procedure required to meet this standard.

5. Conference of state and county staff on district or type of farming area basis.
   a. To review and interpret analyses of state and county situations.
   b. To agree upon some of the more outstanding problems.
   c. To plan detailed procedure to be followed in counties and communities. (State advisory committee, or representative rural people from important type of farming areas, may well be invited to this conference.)

B. *County procedure:*

6. Supervisor and county extension agent meet with the county program coordinating committee. (In some instances the existing executive committee of the county extension organization, or the combined agricultural, home demonstration, and junior councils may become the coordinating committee. In other instances it may be desirable to set up a special coordinating committee composed of men, women, and older youth representing all the important rural interests of the county.)
   a. To discuss desirability of outlining a long-time policy or program relating to the needs and interests of the rural people of the county.
   b. To outline procedure to be followed in determining such a long-time program.
   c. To consider salient facts revealed by analyses made by specialists and agents.
   d. To arrange for county-wide meeting to be attended by one man and one woman leader from each community. (These representatives might well be the chairmen of existing local extension groups.)

7. Supervisor, extension agent, and the chairman of the coordinating committee meet with community leaders in a county-wide meeting.
   a. To explain purpose of program-planning effort.
   b. To agree upon uniform procedure to be followed in analyzing community problems.
   c. To arrange schedule of community committee meetings.

PROGRAM-PLANNING PROCEDURE (*cont.*)

8. Extension agents meet in the communities with committees composed of the representatives attending the county-wide meeting (step 7) plus a few other local persons selected because of interest and knowledge of local situations: a. To analyze the broad problems of agriculture, homemaking, and rural youth of the area; giving special attention to land use as it may influence the present and future status of rural families. b. To indicate the significant problems of the area and the assistance desired from county, state, and federal agencies in arriving at satisfactory solutions. c. To furnish the information on local situations requested by the coordinating committee. 9. Reports of community committee on local problems and situations analyzed by the county extension agents.	
10. County coordinating committee reviews community information and, in light of factual analyses prepared by state and county extension staff, organizes county-wide committees on major problems. The county problem committees will, for the most part, be composed of rural men and women who served on community committees. Representatives of the various state and federal agencies conducting programs with the rural people of the area may be ex-officio members of the committee considering the problem with which they are respectively concerned.	
11. Extension agents and selected specialists will meet with the different problem committees: a. To study and interpret the information available from factual sources and that assembled by community committees. b. To set forth the important needs of the rural people of the county. c. To outline a long-time program looking to the solution of these problems.	
12. The program-coordinating committee will sponsor an all-day county-wide planning meeting to be attended by the members of all the problem committees, supervisors, selected specialists, extension agents, and the	

county representatives of all federal and state agencies conducting programs for rural people. a. The forenoon will be devoted to meeting of problem committees to put the finishing touches on their recommendations. b. The afternoon will be devoted to a joint meeting to (1) Hear committee reports, (2) Consider amendments, and (3) Adopt recommendations for long-time programs.	
13. The county program coordinating committee will: a. Review the recommendations of the county planning meeting, making such minor adjustments as may be desirable to reduce overlapping and promote clarity. b. Select, for immediate attention, those matters of greatest urgency, which are at the same time practicable of accomplishment. c. Arrange for a cooperative attack on problems by the rural people of the county, utilizing to the fullest the facilities provided by the various federal and state agencies operating in the area.	
14. Community-wide meetings attended by the county extension agents, at which: a. The recommendations of the county planning meetings are presented and discussed; also, the problems selected for immediate attention by the county coordinating committee. b. Decision is made as to local problems to be given attention, and how community can cooperate in solving problems of a county-wide nature. c. Plans are outlined for attacking these problems.	
C. *State program:* 15. The state program coordinating committee with its various problem subcommittees, including land-use, should: a. Carefully review the county programs in much the same manner as the community recommendations were reviewed by the county problem committees. b. Outline a long-time state program. c. Select certain problems for immediate attention. d. Arrange for a cooperative attack on problems by all state and federal agencies in position to contribute to their solution.	

CRITERIA FOR JUDGING PROGRAM-PLANNING PROCEDURE *

By M. C. Wilson, in Charge, Extension Studies and Teaching, and Mary A. Rokahr, Extension Economist, Home Management, U.S. Department of Agriculture

Criteria	Check if procedure meets standard		
	Adequately	Partially	Slightly or not at all
1. Scientific or factual approach:			
a. Analysis of available information (Census, farm-management surveys, etc.)			
b. Collection of additional local information			
c. Resources of research, teaching, and extension staff of college fully utilized			
2. Major problem approach, giving adequate consideration to:			
a. Needs and interests of rural people			
b. Differences in community situations			
c. Coordination of agricultural, home economics, and 4-H club programs from the standpoint of the farm family			
3. Participation by farm people:			
a. Widespread			
b. Genuine (true partnership relation)			
c. Such as develops local responsibility for the solution of problems			
4. Takes into consideration of and builds upon previous extension programs.			
5. Provides for possible contributions of agencies outside the Extension Service, which are administering programs directly affecting rural people			

* Prepared for use by extension workers in attendance at summer session course relating to extension organization, programs, and projects (see also County Program-Planning Procedure).

Criteria	Check if procedure meets standard		
	Adequately	Partially	Slightly or not at all
6. The program is determined with: a. Reasonable dispatch and efficiency considering the educational processes involved			
b. No unnecessary steps are employed			
c. No nonessential organization machinery is set up			
7. The extension program which results from the planning procedure in question must be: a. Sound, socially as well as economically			
b. Practicable of accomplishment .			
c. Specific, to facilitate execution .			
d. Objective, so that progress can be readily evaluated			
e. In keeping with wise land use and other desirable long-term trends			

CHAPTER XV

Carrying Out the Program

THE FINEST PLANS of mice and men must still be made to work. "Plan your work and work your plan" is an old adage. Carrying out the program is an executive job. In this sense all extension workers are administrators. To be sure, there are those in state and field positions who spend most of their time in administration, and there are others who, like the specialist, have few if any such responsibilities. However, certain characteristics of good administration must be understood by all.

Some Administrative Procedures

Most extension workers do not have a large group of workers under their supervision, but each employee of the Service is a part of a large system. It is important to understand the lines of authority and responsibility above and below one's position in the organization. One of the most common administrative principles is delegation.

Delegation means the conferring of a certain specified authority by a higher authority. It can be done effectively only when there is "unity of command" or a single source of final authority. Usually the delegation is revocable and subject to modification. Without delegation no organization of much size can function effectively.

There are two types of delegation which the administrator may make. They are (1) *Authority*, or the right to require action of others; and (2) *Functions*, usually of a staff or service nature.

Effective delegation requires:

1. A good basic organization.
2. Courage on the part of the administrator.

3. Faith in his associates.

Some further principles to be observed in making delegations are:

1. Grant authority commensurate with the responsibility which the staff members will have.
2. State the authority or functions delegated in clear terms.
3. Avoid conflicting or overlapping delegations.
4. Be sure that all staff members concerned are informed of the delegation.
5. Encourage on the part of associates a desire for responsibility.
6. Reduce authority to writing and make a matter of record.[1]

Our Personal Part [2]

There are various human characteristics which must be constantly drawn upon in executive work. We must have an abiding interest in people if we are to work continuously with people. Our enthusiasm must be unfailing, especially when others are tired or interest lags. When accompanied by a genial, unselfish approach this attitude builds loyalties which go far in motivating any effort from camping to campaigning. As in all things, enthusiasm must be tempered with reasonableness and calmness. An excitable person is tiresome to work with. Everyone respects the cool-headed, unruffled worker. During the German occupation of Athens, an American relief worker at breakfast was heard to say, "Everyone seems excited around here but me—I'm going along calmly pouring my coffee into my cup—but the cup is upside down." Again, H. E. Babcock, the pioneer promoter and organizer of farmers' cooperatives, once said in speaking to employees: "Don't be a neck-moulter!" Now a "neck-moulter" is a chicken which has begun to lose feathers from its neck, looks battered and barenecked, and keeps right on eating but stops producing eggs. The cause (according to poultry specialists) is some sudden change in management. Mr. Babcock wanted cooperatives to have employees who could take a sudden change in management without losing their stride. Prompt adjustments to changing conditions are a part of good executive procedure.

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[1] See *Extension Administration, Report of Workshop, Extension Service Farm Foundation, Univ. of Wisconsin* (Madison, 1946).

[2] See also E. H. Schell, *The Technique of Executive Control* (New York: McGraw-Hill Book Co., Inc., 1934).

Direct but tactful methods of approach save time and create confidence. Listen attentively to constructive suggestions. Seek for the truth. It is simpler than subterfuge. Frankness may be overdone, but sincerity and conviction are safe characteristics for which to strive. Courtesy follows sincerity and stimulates respect in others. When it is sincere it will not be overdone. Strive to motivate workers by appealing to the characteristics of each in his own way. Some folks are neat, some are imitative, some are fighters in a good-natured way, some crave self-expression, and many have combinations of these characteristics. Home and family instincts are among the strongest motivating forces. Extend every possible aid and courtesy to new employees.

Praise and recognition of valuable or efficient associates are always appreciated; they answer the basic psychological desire for approval. Criticism should be handled as impersonally as possible but always when alone with the person concerned. Appeal to the best nature of people. Suspicion is answered with suspicion. If fear and hatred become firmly established in a live organization it is time for a change somewhere. Beware of false rumors and uncertainty. Never engage in cheap gossip about associates. If there is disagreement, let the matter rest a while and re-examine the facts. Before stating or writing a flat disagreement with some policy or order it is well to inquire as to reasons and usually to attempt honestly to comply. Perhaps unworkable aspects can be changed or will be recognized by the person responsible. It all sounds like common sense and most of it is. Our job is to practice it in carrying out our plan of work.

Elements of a Plan of Work

The sixth principle of program building mentioned in Chapter XI is to have a definite plan of work. We defined a plan of work as an outline of procedure so arranged as to enable efficient execution of the entire program. Assuming we have completed or revised the statement of the situation, problems, solutions, and objectives we may proceed with reasonable confidence that we know *what* we are trying to do and *why*. Our plan of work to carry this out must tell us *who, how, when* and *where.*

Whom shall we reach? Every problem appearing in the program concerns specific people. It may include every home in the county or certain selected ones. Choosing mailing lists and places for meetings are important. Mistakes are sometimes made by assuming that a certain group of people are being reached by a certain method when in fact they are not. For example, a list of hog growers would not ordinarily include the many part-time farmers who "keep a pig." Are

Figure 18. A 4-H Club poultry project teaches boys and girls accepted poultry management practices, record keeping, and other valuable lessons.

we trying to reach part-time farmers or only commercial farmers? Shall we serve all homemakers in rural areas and villages alike? If so, what is a village? Shall we have anything for city boys and girls in the county? If there is a large city in the county, what shall we do about service to city people with lawns, shrubs, flowers, fruit trees, and consumer problems.

The character, culture, and location of the people we decide to reach will affect the methods we must use. It is important to have the names and addresses of all people we intend to reach. If the census gives the number of people in a certain category and our list is only half that number, the chances are that our excuse for the difference is part rationalizing. The census also tells us of a growing

rural nonfarm population. This means a rural population with divergent interests. At the same time specialized farming is sharpening differences in interest groups. There is also evidence that rural and urban areas are developing greater unification, with fewer differences between city and country folks. These population trends are sufficient reason in themselves for us to give careful thought to the question of whom we are trying to reach.

Once we know definitely the total or particular group we want to reach, then it is possible to choose the leaders within this group or leaders who can reach out to serve them. If the group is small, perhaps direct teaching will be possible. More often, the larger the group, the more leaders required to reach the whole group. This may involve choosing some leaders for their organization ability and others for their teaching skills. What specialists will be required? What part will the agent play? Are there any other persons in the locality whose position, business, reputation, or skills can be utilized? A good plan of work actually includes the names of these key personnel whose help it is proposed to enlist.

To get full response from people potentially affected by the recommendations, the extension worker should know where these people live, their primary interests, their social and economic backgrounds, and their previous experience with similar recommendations or information. Many pitfalls in organizing plans can thus be avoided. Among them are: the development of procedures that are too simple or too complicated; the presentation of concepts that are beyond the understanding of people; the failure to understand the effect of the social and economic backgrounds on responses to recommendations; and the failure to "time" the presentation of the information to secure the most effective response.[3]

How shall we work? This brings us into the field of choosing methods. Field studies show that changes in practice by individuals are caused by a wide variety of teaching methods. These usually require several contacts or repeated contacts to get results. No practical plan of work is possible without visualizing the actual things

[3] Ronald B. Almack and Cannon C. Hearne, *Suggestions for Securing Effective Participation of Rural People in Educational Programs*, Manual 35, Agricultural Extension Service, Columbia, Missouri (June, 1944).

which can be done under the conditions, at the time or place proposed, and with the money and personnel available. We know that a personal visit by the extension agent is one of the most effective methods. This is not practical, however, except to a limited number of people. Therefore we chose various methods of training leaders. The most important of the indirect methods is the information service through magazines, press, radio, and bulletins. The selection of appropriate methods, the development of new ones, and the preparation of materials and procedures are important functions of the specialists. Hence he or she must have a direct part in the plan of work, if not in personal conference with county workers, at least through the use of suggestions sent to agents. For further details see methods in Part IV.

Do not wait until the end of the piece of work to determine what results to measure. Plan from the beginning the specific facts that are needed to measure results. In this way we may clarify the job. We will be in a better position to go on to the final step of any good plan—evaluation. Results must be measured before they can be judged for effectiveness (see Chapter XVII).

Through all the plan of work and the methods used, there is the constant need for coordination. General acceptance and smooth operation of plans will have been ensured by forethought in giving other agencies, groups, and organizations their part in the early planning phases. It is most helpful if all agents in a county make plans together, with regular revisions at weekly staff conferences.

When shall we do the work? Here is our golden opportunity to plan things for the best use of time and for the fullest participation by the public. Try to avoid too many peaks of work at the same time. Plan to be getting the attention of people for a certain problem when they are naturally faced with the problem, or are at the peak of their interest for seasonal or other reasons. For example, florists advertise and take orders for tulip bulbs in the spring when gorgeous beds of tulips please the eye and stimulate desire. Nobody plants tulip bulbs then, but everyone notices the flowers and some people make resolutions to buy bulbs. These resolutions may be long forgotten in the fall when bulbs are planted. A farmer whose nose is

full of grain-smut dust during the harvest is in a frame of mind to do something about its control. It is a good time to "line him up" as a cooperator or demonstrator. The demonstration may not begin until six months later when another planting season rolls around.

Timing is an important element in planning. One of the simplest approaches is to let the over-all factors, such as seasonal considerations, fix the month for a given event. Then by thinking about what we must do before this comes about we can "back off" from a given date the blocks of time required to do the preparatory work. For example: As part of the nutrition or health plans a series of meetings must be held on freezing fruits and vegetables. March is chosen for the time, partly to get it done before the earliest produce is ready, but also because the meetings may stimulate interest and affect the kind or quantity of vegetables grown at home. Then we know that notice by mail should be sent about four days before the meeting in each community. Four days are required for preparation and mailing. This is eight days, but before writing the letter we must secure a specialist to help or speak. The exchange of correspondence may take two weeks because the specialist is traveling. But the specialist is making up his or her own schedule three months in advance. We add up these blocks of time mentally or take the three-month period as sufficient margin of safety and write in our plan something as follows:

December 15 Write to college for specialist for series of meetings on freezing Fruits and Vegetables, beginning March 16th at Smithville.

In like manner we plan and write down the dates to "write Mr. ——, committeeman at Smithville, about final arrangements for meeting March 16th." We plan a schedule for press and radio releases timed so as to create interest, boost attendance, and, after March 16, to give a brief of the teaching practices and the news of what really happened. We put down dates for getting needed printing done in advance and make one or two notes about announcing it at county-wide meetings of other organizations. We may call the plan finished for the time being. Later, we get a letter from the food specialists suggesting a "sign-up" of people at the meeting who actually plan

to freeze fruits and vegetables. It is suggested that in late October these cooperators be checked to see what results have been obtained. We get out the plan of work and write: "October 1st. Follow up cooperators in 'freezing Fruits and Vegetables.'" We do not know just now what we will ask them, but we will work that out when the specialist comes to the series of meetings. A fleeting hope passes through our mind that the specialist will have a report card worked out to conform with the "sign-up-card." And so, this undertaking, along with all the others, soon develops into a "calendar of work." Work coordination is achieved if this calendar contains all the work to be done by the county staff. Set the date of big events first.

A sample calendar of work for two months follows:

CALENDAR OF WORK

CORTLAND COUNTY, N.Y.

January (Other dates are filled in as soon as they are fixed.)

4–7. Hold two 2-day Dairy Breeding schools, one at Cortland and one at Cincinnatus or Pitcher with Chenango County.

11, 12. Hold four electric-motor and milking-machine pulsator clinics with vocational agriculture teachers at Homer, Virgil, Truxton, Cincinnatus. Set up two faster milking demonstration herds.

19. Hold father-and-son, new farmer, and landlord-tenant meeting with Prof. S—— at Cortland.

20, 21. Hold two-day feeding and crop production school at Marathon.

Hold school for soil conservation practice demonstrators.

26. Hold meeting of Tri-County Processors and Growers Assoc. Complete final arrangements and publicity for the Feb. Poultry school. Same for feeding clinics.

Make arrangements for February meeting on Farm Building.

Write for specialists at Potato School, Vegetable School, and Prof. C—— for March.

[The above is followed by a list of the main activities to be undertaken by other members of the county staff.]

February

2. Hold county-wide poultry school stressing outlook, farm management, building and equipment arrangement showing movie on watering,

and measure results with a check sheet. Study results of poultry-school evaluation for future use.

8–10. Hold three feeding clinics stressing crop production, permanent and temporary pasture and work with individual farmers on setting up their own program at clinic (Cincinnatus, Marathon, and Truxton). Check on faster milking program and arrange barn meetings.

15. Hold meeting on farm buildings including remodeling, new buildings, barn arrangement, milk houses, ventilation, and labor efficiency.

Arrange meeting with town and fire district officials and represent fire companies on rural fire protection.

Final arrangements and press notices on March Potato School.

Do preliminary work on spray rings for March meeting.

Preliminary arrangements for April tractor meetings.

[The above is followed by a list of the main activities to be undertaken by other members of the county staff. Routine contact with the press does not appear here. Many other methods such as radio, use of bulletins, etc., are not shown in this illustration of how to calendar the activities.]

Where shall we work? In a county extension plan of work, the location of the various activities depends upon the meeting halls and facilities available; the existing and recognized community centers in view of changing trade centers, highways, and other factors; cultural patterns of various kinds; travel distances in relation to probable means of transportation, if any, to be used by the public; crop, commodity, or interest areas concerned with the problem; requests received; and finally the extension methods chosen for use. For example, in a series of barn meetings for livestock producers, farmers will go out of their way to attend a meeting in a new barn just to see the inside of the barn and its layout. Women and men are interested in remodeled homes and kitchens. Boys and girls will be attracted to a place where there are some recreation facilities. A plan of work foresees these factors and names the places for later confirmation when necessary.

Obtaining Maximum Efficiency

The role of each worker in executing the plans efficiently is largely a matter of following up the things each one did in making the plans.

For each activity undertaken, the details must be worked out with the cooperating members of the staff who participate both in planning and execution. For example, the specialist must be well informed by the county extension worker as to just what work will be expected of him in the county, what he needs to bring in supplies and teaching materials, what relation a particular activity has to the whole county program, what follow-up is needed, and many other things which must be the subject of correspondence or conference prior to publication. Getting plans off from paper and into action is not always simple.

The factors that influence the efficiency of operation of the extension organization as a whole or the individual within the organization are many and varied. Limiting factors may include: lack of workers, of knowledge, or of skills necessary to do a given job, or of judgment in selecting the most important job, or of balance within the organization—too many workers of one type and not enough of another; inadequate or imperfect planning which results in improper timing—or even duplication of effort—on a job requiring group action; lack of equipment, stenographic assistance, or other aids in effective use of the workers' time. Even worry over personal matters has caused temporary inefficiency in staff members otherwise usually efficient. Therefore, inefficiencies in operation may be due to fundamental faults in the structure of the organization, to improper coordination of the different elements of the organization, or to personal inefficiencies of individual workers.

Supplementary Organizations

When the number of participators in the program becomes large, experience has shown the value of creating and maintaining subsidiary organizations to make it easy to follow the teachings of the extension program. This was discussed in Chapter VIII. Since it is one important way of carrying out the program it must be included here. Additional illustrations of its use are: canning centers, farm-labor associations, community centers, and youth councils. The value of these groups is in the fact that local responsibility is assumed and more and better work is possible.

Reaching More People [4]

What are the reasons for nonparticipation? How can we reach the people whom we are not now reaching? What methods of teaching can best serve the nonparticipants? Field studies point out that changed practices reported are in direct relationship to exposure to extension information and to contact with extension service activities.[5]

The problem, therefore, is not so much one that relates to the effectiveness of the methods used in bringing about desired changes within the people who have participated in extension activities some time previously. It is rather a problem of determining the interests, needs, and situation of people who have never participated and of choosing the best methods to reach them.

Lack of transportation is an important reason for nonparticipation of farm women.[6] The organization of additional meetings to cut down the distance to meetings and bring local extension groups closer to the rural women would seem to be one of the best ways to obtain participation in home economics extension. Smaller meetings provide a means for social contacts for the homemakers, furnish opportunity for actual participation by the women, and make use of the four accepted ways of teaching—seeing, hearing, discussing, and doing.

Unfamiliarity with extension activities and no contact with extension club or group are important reasons for nonparticipation. More effective use of news stories and circular letters might be made, since there is interest in reading, as indicated by the large proportion of rural families subscribing to newspapers and magazines. The fact that an increasing percentage of rural homes have radios suggests the possibility of the further use of the radio.

A few result demonstrations might establish contact with and

[4] From mimeographed material prepared by Gladys Gallup, Division of Field Studies and Training, U.S.D.A. (1938).

[5] M. C. Wilson, *The Effectiveness of Home Economics Extension Work in Reaching Farm Women*, U.S.D.A. Extension Service Circular No. 101 (1929).

[6] M. C. Wilson, *The Problems of Reaching and Influencing Farm Women Not in Home Demonstration Clubs*, U.S.D.A. Extension Service Circular No. 156 (1931).

confidence in the county extension agents and might strengthen personal contacts. More planned farm and home visits would directly or indirectly influence the program. Visits to farm homes where there are children establishes personal contact, gives the agent firsthand information regarding the problems and activities of younger homemakers, and contributes to the selection of additional cooperators and leaders.

More local leaders would not only save the time of the agent but make possible a greater volume of teaching.

Example of County Program

Space will not permit reproducing an entire county program to illustrate what we have said. However, the following extracts will serve as an example:

RURAL PROGRAM FOR FRANKLIN COUNTY, MISSOURI

Foreword [signed by a man and a woman, officers of the local sponsoring association—1 typewritten page].
List of Township Planning Committees [2 typewritten pages].
Tables of Contents [1 typewritten page].
Situation Statement, Part I [11 typewritten pages].

Subheads were: Location, Early History, Physical Description, Type of Farming, giving acreages of crops and animal numbers, Agricultural Income and Farm Family Living (material under this is quoted in full, below).

Farm Family Living

The average farm family in Franklin County consists of 4.3 persons. The typical rural house is large and roomy, with central hallways that can, in many cases, be remodeled into bathrooms and built-in space for clothing and linens. Sufficient kitchen storage and convenient kitchen arrangement is also lacking. Only one-fourth of the rural families have running water in the home. Eighty percent of the rural families had electricity in 1948 as compared to twenty per cent in 1940. Many of these families, however, do not have the electrical appliances that would improve family living.

On the better farms, buildings are in good repair. One-third of the farm homes are in need of major repair.

Generally speaking, household equipment and furnishings are wearing and will not be adequately replaced until lower-priced materials are available.

Two-thirds of farm families have telephones, and some eighty-five per-cent have radios.

Although ninety per cent of the lawns are fenced and have plantings of trees, shrubs and flowers, many show a lack of planning the location of plantings.

Other subheads were: Rural Nutrition, Clothing, Rural Health, Rural Schools, Churches, Roads, County Industries, Cooperatives, Federal and State Agencies Working with Farmers.

Objectives and Solutions, Part II [7 typewritten pages. Five general objectives are stated with specific objectives listed in detail under each.].

1. Parity income from farming.
2. Attractive and efficient farm homes.

[We quote in detail to show how the specific objectives are each supported by the Situation Statement quoted above.]

A. Remodeling for convenience and comfort

(1) Electricity made available to all farm homes.

a. Wider use of electricity and electrical equipment to save time and labor.

b. Correct home lighting considered when wiring and purchasing fixtures.

(2) Running water in every home.

(3) Sanitary sewage disposal.

(4) Adequate and convenient storage space.

(5) Convenient arrangement of equipment and furnishings.

(6) Adequate heating systems.

(7) More emphasis on color in the home, home decoration and accessories.

B. Adequate furnishings.

(1) For comfort.

(2) For encouraging the development of the finer arts such as musical instruments, radio, books, reading materials, etc.

(3) Telephones for all farm homes.

C. Landscaping.

(1) Definite plan for developing home yards.

(2) Home yards that have esthetic value, provide space for recreation and practical service area.

(3) Sufficient and well located walks and drives.

3. Progressive communities.
4. Improved health and sanitary conditions.
5. Interest youth in farm life.

This program states objectives, immediately following a thorough discussion of the situation, without actually writing out the problems. These are implied in the objectives and solutions. Such a complete program will stand for several years, with slight annual revision. A plan of work prepared each year will show where emphasis will take place. This illustrates the principles of permanence with flexibility and balance with emphasis.

Examples of County Plans of Work

The following is an extract from the "Plan of Work, Tishomingo County, Mississippi, for Developing an Organized Community Recreation Program." The first three pages are devoted to stating the recreational situation and problems, why it is important, the obstacles, etc. Then comes the Plan of Work, as follows:

VIII. Goals

1. To develop one active functioning center, using a school building to begin with.

2. To have at least 50% of the people in this community participate in the program.

3. To have the community assume responsibility for the center and the program. To have local leaders plan, supervise, and direct programs.

4. At least 3 other communities to begin plans for organizing recreation programs.

5. To change the attitudes of people in these 4 communities toward recreation.

IX. Teaching Plan

1. Leaders' Meetings

County leaders meeting to analyze situation, select problems, set

goals and select communities where work will begin. Church leaders, teachers, farm security, public health, minister, 4-H clubs, home demonstration clubs and other rural organizations will be represented at this meeting.

2. Four other leaders' meetings will be held to give instruction and guidance in recreational philosophy, planning, supervising, and in skills needed to meet needs and interests expressed by community people. Leaders make decisions on these.

3. Assistance to M—— Community, which was selected by county leaders' group as the place to begin the program.

a. Visit Mr. L—— S——, a recognized leader in M—— community, who has asked for help with the program.

b. Make plans with him for a meeting of leaders of M—— community—to include church, school, 4-H clubs, home demonstration club, farm organizations and ministers. He will arrange for the meeting and notify representatives. At this meeting will be discussed possible meeting places and plans; give an opportunity for them to express their interests.

c. Extension specialist in recreation to be invited to this meeting.

d. Hold this community leaders' meeting to (1) discuss plans for a community survey on (a) what people are now doing for recreation and (b) on what they want to do; (2) select a committee to plan a community party and meeting, and to contact school board about using school building.

e. Write news articles on plans for the survey, and to report the leader's meeting in M——.

f. Ask the M—— committee chairman to visit extension office for program suggestions and to help work out survey blanks. Prepare these blanks and send to the committee chairman. Will also help committee chairman to analyze results of survey.

g. Give Mr. S—— suggestions for a news article about the community party and meeting to be held at the school.

h. Attend community party and meeting in M—— Community. Leaders in charge of meeting. At this meeting three things will be done: (1) people will take part in a planned party, (2) reports of the survey will be given, and (3) decision will be made by the community on whether or not they want an organized community center with a program, what kind of program they want, based on the survey, how they will conduct the program, meeting places, time of meetings, who will be

in charge, and what form of organization they will use to carry out the plans and supervise the center.

i. News article on results of M—— survey and plans for future to include report of meeting.

j. Take pictures of M—— meeting place before any work is done on it.

k. Keep in contact with M—— leaders and give them suggestions and reminders for publicizing each meeting before and after being held.

l. Prepare check sheets for M—— and other leaders to use in reporting changes in attitudes toward recreation, in recording attendance at meetings, and for reporting on behavior and misdemeanors of young people.

m. Make visit to one other community meeting in M—— to observe progress they have made in carrying on programs. Take pictures of place with new equipment and of people in action.

4. Publicize each county-wide leaders' meeting before and after it is held. Put picture of group at work in paper if possible.

5. Have progress reports from M—— community given at county leaders' meetings.

6. Ask recreation specialist to assist with two leaders' meetings, the public school music teacher in I—— to assist with one, and agents and health department will conduct the other.

7. Secure program suggestions from state extension office for leaders' meetings.

8. Help with one community leaders' meeting each in G——, T——, and P—— communities.

9. News article at end of year on progress of program.

X. Determining value of program (measuring progress)

1. Was M—— center set up and operated during year?

2. Number people who participated, number who didn't. Use check sheet.

3. Change in attitude of people toward program (participation, expressions, and use of check sheets).

4. Improvement in behavior of youth, as reported by leaders of various organizations.

5. Have leaders assumed responsibility?

6. Is there an organized plan for continuing the program and for financing some equipment?

7. How many other communities have started programs, or have expressed an interest in a center?

The plan above does not show *when* the work will be done. To partially illustrate a calendarized plan we give the following example from "A Program for Increasing Labor Efficiency on Dairy Farms in Schenectady, New York." The plans, as shown below, follow several pages of situation statements, problems, and solutions. We give only the month of April.

PLAN OF WORK

April

5–6. Trip to Cornell Farm and Home Week for Dairy Commodity Committee and all interested dairymen.

8. County meeting to hear reports from committeemen taking trip and discussion of plans for campaign to follow.

15. Launching meeting of county-wide campaign on changing farm layout. (a) Make and present poster at meeting. (b) Inform those in attendance about before-and-after pictures to be taken. (c) Publicize results of meeting and purpose of campaign in newspaper and on radio. (d) Have extension agricultural engineer at meeting, make recording, and have press conference.

18. Send out Extension Service letter on Dairy Barn Management Program to dairy list.

25–29. Arrange for local community meetings at farms of participants making changes.

29. Show before-and-after pictures at Pomona Grange.

30. Attend Holstein breeders' meeting and speak on purpose of campaign.

CHAPTER XVI

Development of Leadership

AN ACCEPTANCE of the foregoing principles of program building is accompanied by a realization of the important place of group leadership in extension work. There are two kinds: (1) the leadership of the professional or paid extension workers, and (2) local lay leadership. Leadership in extension work is only one segment of rural leadership. However it is vital to extension program building and in the carrying out of extension work. The extension staff must know how to work with groups and stimulate leadership development, which is a part of the fundamental aim of extension. It is the good fortune of extension workers to be engaged in a job which is designed to bring education and service to a community through leaders who are discovered and trained in the process. Through those leaders programs are planned and executed.

The Role of Professional Leaders

An extension worker must give attention to his role as a leader lest he find himself an amateur in a professional league. To understand the actions of people about him he must study sociology, psychology, anthropology, and the applied aspects of leadership, sometimes called the art of leadership.[1] By the application of this knowledge to life he may come to be a skillful leader. He must know how to stimulate and train members of a group to function as leaders. He must not usurp leadership from the people whom he would serve but must allow the leaders from the group to function. If he does not

[1] See Ordway Tead, *The Art of Leadership* (New York: McGraw-Hill Book Co., Inc., 1935).

do this, when he moves away there is no active lay leadership to carry on the work he started. While retaining his position of close confidence and remaining in his true role as a coach who gives ideas, encouragement, and direction, he may set the stage for group action which strengthens and builds for the future. It may be easier for him than for local people to give abstract or unbiased thought to local matters. He must be constantly alert to new ideas and better methods, while at the same time he is conscious of the practical requirements of the group he would influence. In this manner he furnishes the vision and suggestions that often gradually, but not less certainly, cause the group to choose its own leader to aid in setting and reaching a desired objective. Dwight Sanderson wrote:

> The county agricultural agent may lead his constituents into a free discussion of national agricultural policies and international and economic relations affecting them, or he may pursue his customary role of showing the farmer how to produce more crops at lower costs. In these cases, if the employed leader undertakes to be the real leader of the group, in the advocacy of progressive ideas and methods, he is very likely to lose the support of the more conservative members of his group, and it may result in his position becoming an impossible one so far as effective leadership is concerned. On the other hand, if he quietly educates local leaders so that they advance his ideas as their own and assume active leadership on their behalf, the employed leader may maintain his role as educator and stimulator of group thought without centering antagonism on his personal leadership. This is not to imply that the employed leader should take a neutral course simply to maintain his own security, or that there are not circumstances in which he must take a stand and be prepared to take the consequences, but that in most instances the cause that he advocates will be more effectively and permanently advanced if it is espoused by local leaders who are the choice of their groups or who create their own following.[2]

The major problem of an extension agent is to determine who is the natural leader in a group. It is better to accept the chosen leaders of a group than to try to impose others by any pressure. It takes time to do it the right way. Patience is essential. Confidence must be

[2] *Leadership for Rural Life* (New York: Association Press, 1940).

established and often attitudes must be changed. By following this with supervision and leader training the professional leader is on the way to realization of his own role.

The Role of Local Leaders

In our definitions in Chapter XI, we said that local leaders are people selected, because of special interest or fitness, to work on some phase of the local program. These people belong to the primary group with which extension works. For the most part they serve without pay, deriving satisfaction from the improved conditions which result. They also have a wide variety of personal reasons which motivate them; we shall discuss these later. Let us first discover a leader's role. What does he do? How does he work? How do other people regard him? Here again Dwight Sanderson pointed out the basic facts in saying that not only is the leader a member of the group but "the position of leader is an essential mechanism of effective group organization." Groups are dependent on leaders and without them are helpless; leadership is associated with responsibility. What the leader does or fails to do directly affects the welfare of the group. The actions of the group also affect the leader. The group usually helps him by according him respect and power. Mutual confidence permits the leader wide discretion and broad powers. This is a favorable situation for the introduction of changes. What one local leader can do easily may require considerable time and effort on the part of another. The members of the group expect the leader to speed up the processes which will help them achieve their common purposes. They will do almost anything for one who truly represents them and has earned their loyalty; with those qualities he might be a poor speaker, might be uneducated, or might have little personal magnetism or other commonly accepted attributes of leaders and still be successful.

An understanding of this role of the local leader is essential for extension staff members. If a county agent cannot get the consent or approval of local leaders for a course of action, he must take it as a true guide to what can be done through the groups they represent. He must then turn to other groups, work with individuals, or "lay

the matter on the table." By working with individuals, in time he may develop a more favorable situation. On the other hand, when a gathering of local leaders who are well established with their groups come to a conclusion contrary to the ideas of a professional leader it is well to abide by their judgment. One local leader may be wrong or have unwholesome motives, but there is almost no better guide to local action than a strong expression from a group of such leaders.

In our definitions we spoke of administrative leaders and teaching leaders. This is a distinction based on requirements of the job to be done. The functions of all leaders include a certain amount of planning, organization, and teaching, or selling of ideas. In extension work we often divide the duties to get greater emphasis and lighten the load of each person involved. We need many people who can teach others the practices and skills called for by the program. Often those who teach them best are those who helped plan the program. Other persons feel they can work for action and help the group most in other ways than by teaching.

Three Aspects of Local Leadership

For most local leaders in extension there are three aspects to consider: (1) the job, (2) relations with the group and its members, and (3) the leader's own development and satisfaction. Years of experience with this in the New York State College of Home Economics and its extension work resulted in specific suggestions [3] to local leaders, from which we quote:

THE LEADER AND HER LEADERSHIP JOB

To do your work well, you need to:

(1) Have an abiding faith in the worthwhileness of the extension program for home and community life.

(2) Do the best you can with what you know whether you have been chosen as a leader, "pushed into" leadership, or have volunteered to lead.

(3) Discover new abilities.

(4) Be willing to learn and to try new things.

(5) Develop skill and find more effective methods of work.

[3] From the *Home Bureau Handbook*, New York State College of Home Economics, Cornell University (Ithaca, New York, 1946).

(6) Play fair by accepting your share of responsibility and of work.

(7) Take your turn as a follower and with good sportsmanship give other leaders encouraging support.

(8) Take the trouble to learn how to do your work well and how to relate it to current problems.

THE LEADER AND HER RELATIONS WITH MEMBERS OF HER GROUP

To work well with members of the group, you need to:

(1) Direct, by your example, some special activities or some undertaking.

(2) Take the initiative, set action going and, through giving this spur to action, inspire members to get things done.

(3) Respect each member and give each a chance to learn and a chance to contribute.

(4) Guide but do not drive.

(5) Give a lift and encouragement when difficulties are met.

(6) Avoid apology and blame for yourself or others.

(7) Know that a satisfied member is better than a perfect product.

(8) Make it possible for members to get a feeling of achievement from their work with you.

(9) Make the activities you take up together useful, worthwhile, and rewarding. Together you must feel a sense of progress.

(10) Remember that the purpose of leadership is sharing, to help others to help themselves to greater satisfaction and happiness in everyday living in their homes and communities.

THE LEADER AND HER PERSONAL DEVELOPMENT AND SATISFACTIONS IN LEADERSHIP

For personal development and satisfactions in leadership, you need to:

(1) Know that doing things that are hard gives a challenge and a fine sense of accomplishment when achieved.

(2) Seek self-improvement.

(3) Learn to speak better, plan better, think better, and manage better.

(4) Gain appreciation and understanding of what people are like and how they are influenced.

(5) Like people and enjoy working with them.

(6) Build constructively and look on the positive side.

(7) Avoid taking yourself too seriously and get fun out of what you do.

(8) Remember you are human and therefore apt to make mistakes. You can learn from your mistakes and then think no more of them. Spend no time in remorseful regrets.

Discovery and Enlistment of Leaders

Leaders do not inherit their jobs. The job came into existence and the man or woman was found. The first thing to remember is that leadership is specific. We cannot deal in generalities and make any progress. Assuming there is work to be done we may use the following:

Steps in discovering leaders

1. What is the job to be done?
2. What characteristics and skills does this job require?
3. Where is the person with these qualifications?
4. What group will support or follow this person?
5. Of the qualities he has—
   (a) which of them may be improved by training?
   (b) which may not be changed materially?
6. Of the qualities he lacks—
   (a) which may be developed by experience and training?
   (b) which may he never hope to have?
7. On what basis shall a qualified person be induced to serve?

Unless we proceed in an orderly manner from one step to another we shall not know where to look for trouble if our procedure fails. If we are not clear about what needs to be done, how can we explain or show a group what knowledge and skill are needed? When we know what qualifications are needed it is easier for the group to find a leader. This human problem is complicated by the fact that some qualifications can be acquired and others are largely inherited. For example, some of the basic personality characteristics desired in a 4-H Club local leader are health and energy, intelligence, friendliness, dependability, courage, patience, etc. These may be found ready made. Other characteristics may be acquired or improved by training and experience. These may be such as subject-matter knowledge, enthusiasm or singleness of purpose, ability to teach or stimulate others, ability to organize, to delegate, to plan. When a group comes

to actually enlisting such a person, other factors may have a deciding influence for him. Some of these are what he considers to be the rewards and satisfaction from his service, the interest of the group, and the importance the job seems to have. Let us consider the example of Mrs. F——. She read in the local paper that the agricultural agent had announced that communities were being en-

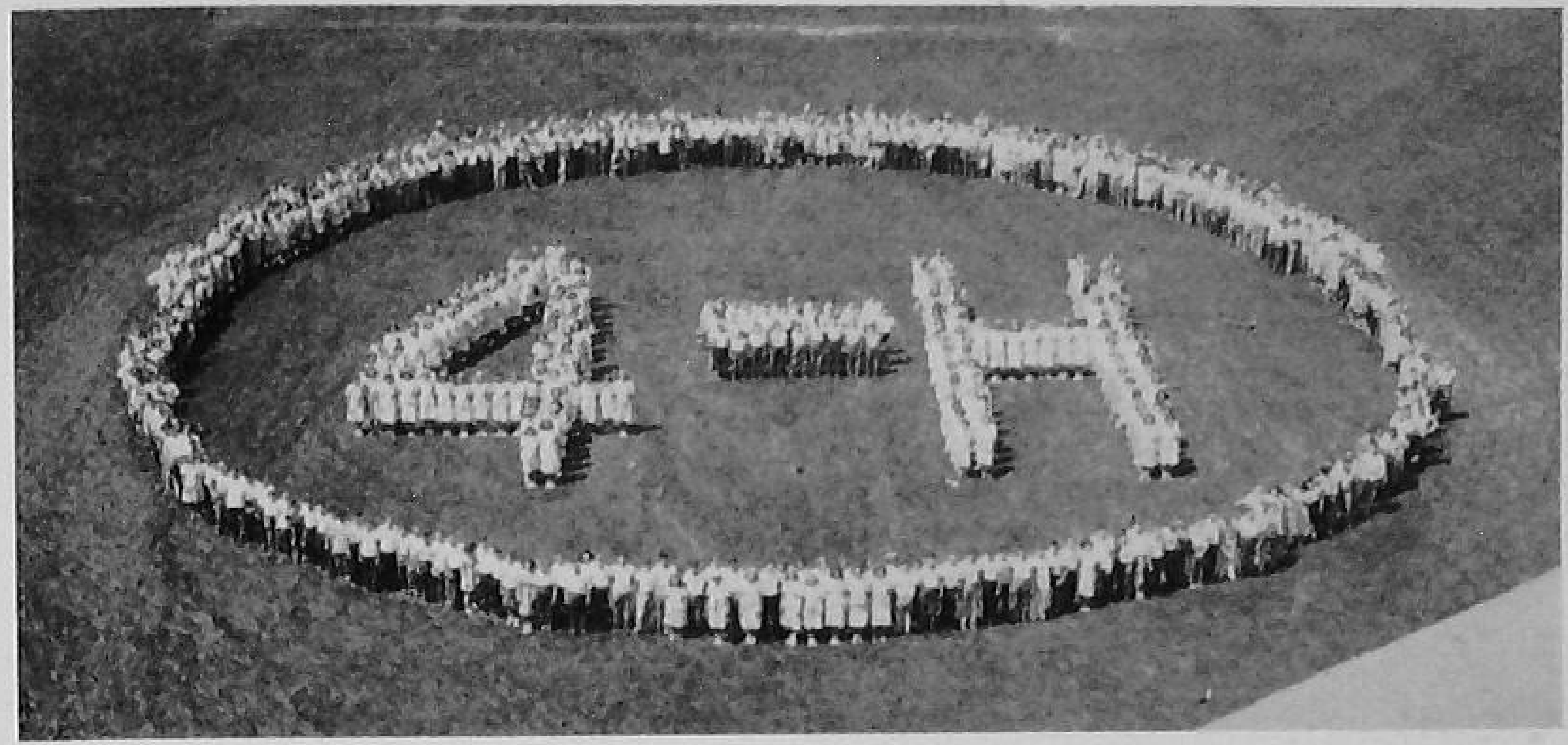

Figure 19. Participation of thousands of 4-H Club boys and girls in county, state, and national functions helps prepare them for service in club and community life.

couraged to form local homemakers' clubs in the hope of eventually employing a county home demonstration agent. Mrs. F—— had a friend who had written about this work in her letters, and it seemed to be a good thing. Mrs. F—— attended a meeting where the matter was discussed. She related what her friend had told her and explained how she thought home demonstration work would help their community. Mrs. F—— was elected chairman of a committee to organize a local club and was chairman of the local homemakers' club when the new home demonstration agent was employed. She became a teaching leader also for her club. After several years she was elected to the county committee, and in the tenth year she found herself at the head of the county home bureau. The county agricultural agent, who had originally enlisted her interest, had gone to another county. He was both surprised and pleased to find twenty years later that Mrs. F—— was elected president of the state home bureau federation. This illustrates how leadership ability thrives with oppor-

tunity. Maintenance of interest and opportunity for development and training with satisfying experiences were sequels provided through home economics extension.

How does this all start? There are three common ways, or combinations of them, by which it may start. Leadership may originate with an individual, a group, or a job to be done. A person may see some problem that interests him or catch a vision of some improvement he thinks is needed in the community. Moved by this interest, he takes a few steps, and others begin to follow. Perhaps there is a group organized or unorganized which recognizes a need and wants some action. It chooses a leader and gives him responsibility to do something about it. When a job needs to be filled we have a favorable situation for good initial leadership because the qualifications for the job are apt to be foremost. This is a healthy basis of origin. For example, a community council is formed, and it needs publicity so that people will know what it is and what to expect. Mr. R——, a person with some newspaper experience, is chosen to be chairman of publicity. He does a good job and is later chosen as president. He moves from this to greater responsibilities. In extension work we have a good medium for speeding up this process. Extension staff members are constantly bringing problems, jobs, and qualifications to the attention of people who in turn choose and support leaders. Studies show that leaders elected by their neighbors are better known and usually better received than those selected by other methods.

Leadership Development and Training

Experience shows that there is potential and resourceful leadership available for extension work in the communities if it is stimulated and used. Persons who have served as leaders in extension have not only increased their ability and knowledge in farming and homemaking but have gone further, giving leadership in other community activities. Occasionally such leadership has served as a steppingstone to political leadership.

Charles W—— was a small farmer who lived at the edge of the village. He was chosen to be chairman of the local agricultural committee, because he was respected by everyone. After two years he

was made township chairman. The extension program began to prosper under his leadership. People thought that he could help the town by representing it in the county government. He was drafted by his political party and elected. After five years he became chairman of the county governing board. It was then ten years since he first assumed local leadership. All through these years he said that association with extension work had helped him in many ways, such as in facing community problems and in finding solutions for them. Once started, the process of leadership development may have far-reaching consequences.

There is need of continuously teaching a clear conception of the organization set-up of which leaders are a part. New members and leaders are always suffering from an assumption on the part of their associates that they know things which they really do not know. It may be flattering, but it is not comfortable for the new leader or good business from the standpoint of getting results. A few devices for training are suggested here.

1. Training meetings: (a) to teach principles, (b) to give practice in conducting meetings or interviews.
2. Handbook for leaders (looseleaf).
3. Regular service letter for leaders (punched for the handbook).
4. Occasional circular letters and personal letters.
5. Printed leaflets, bulletins, or books.
6. Visits to the leader by the agent.
7. Apprenticeship: (a) substituting for and assisting other leaders, (b) performing selected tasks under instruction and observation, such as presiding at part of a meeting.
8. Participation in discussions of all kinds (this trains people to think and express themselves in the presence of others).

General suggestions for county extension workers to observe in training local leaders have been prepared in outline form by Dr. Gladys Gallup.[4] The devices given above and the following suggestions grew out of studies of neighborhood leader training. The word neighborhood has been dropped here since the matter applies to all leaders.

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[4] U.S.D.A. Extension Service Circular No. 397 (November, 1942).

In training leaders, basic principles of the psychology of adult learning should be observed. Adults learn as well as youths, but a little more slowly. Reasons are: (1) Less acute vision and hearing, (2) slower reaction time, (3) greater reluctance to learn, and increased fear of failure.

Some adaptations to these limitations:

A. Because of less acute vision and hearing of adults—

1. See that people are comfortable, can see what is done, and can hear what is said.

2. Mimeographed or printed material should be in large enough type to be easily read.

3. Use simple, well chosen words that are clear and meaningful.

4. Use large, legible writing on blackboard, as vision then supplements hearing.

5. Speak distinctly and slowly.

B. Because of slower reaction time of adults—

1. Only one or two assignments should be given at one time.

2. Give specific assignments that leaders can do.

3. Assignments should be well planned, and controversial points cleared before presentation; avoid duplication or confusion.

4. Teach one thing at a time in logical sequence, first the why, then the what, the how, and the when.

5. Relate new material to what is already known; give material in short units.

6. Repeat often. People forget much that is learned, unless careful follow up prompts them to act. "A typical educated audience presented with a subject in which there is already some interest may be expected to forget about two-thirds of it within one week."

C. Because of greater reluctance of adults to learn and their fear of failure—

1. Make it easy for leaders to learn. See preceding points A and B.

2. Continually ask for and use the practical experience of leaders.

3. Give opportunity in meetings for actual participation of each leader. Meetings should give them a chance to exchange ideas, to discuss their individual successes.

4. Provide the leader with more information than that to be given to families.

5. Provide recognition. Adults, whether they admit it or not, wish reward. Give them help and encouragement; commend their initiative.

6. Arrange for recognition of leaders, know name of each leader, mention names in meetings, in news stories, over the radio.

7. See to it that the leader gets satisfaction from his work. Be sure that each leader has an understanding of what he is to do, with a spirit to do it. Adequate training, adequate opportunity to prepare, with advance information, tend to insure greater satisfaction. Leaders should not start on their assignments until their material is available.

Building and Maintaining Interest

Interest and enthusiasm of local extension leaders must be built up and maintained in order that they may continue to work effectively. Some of the steps [5] that may be taken are:

1. Give the community an understanding of the Extension Service, its importance, and the local leader's job.

a. Use "fill-in" news items in local papers.

b. Use radio talks.

c. Send timely circular letters to the community.

d. Hold neighborhood or community meetings.

e. Have the leader elected by the club or community or selected by a local committee for the job which he and the group think needs to be done.

2. Give local leaders an understanding of their job and its importance.

a. Furnish complete information on the purpose of the work and results expected.

b. Write out the duties and responsibilities.

c. Use various methods for recognizing the leaders such as:

(1) Have a formal letter of appointment from an official high in the organization.

(2) Have the leader file an acceptance card when he goes to work.

(3) Provide an induction training meeting, or several meetings, for new leaders.

(4) Give the local leaders responsibility for determining dates and places for local meetings and other local decisions.

(5) Furnish a loose-leaf notebook or printed folder for the leader's materials.

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[5] Adapted from *Suggestions for Building and Maintaining Interest and Enthusiasm of Neighborhood Leaders*, by Lucinda Crile (U.S.D.A. Extension Service Circular No. 400, January, 1943).

3. Ask for suggestions, advice, and participation from local leaders.
   a. In building programs
   b. In conducting meetings and other activities
   c. In personal conversation
   d. In getting and interpreting records
4. Help and encourage local leaders.

a. Personal visits by extension workers to local leaders are rated high as a means of stimulating and maintaining interest.

b. Where staff members cannot visit all local leaders personally, arrange for the appointment and instruction of county or project leaders who will volunteer to visit local leaders.

c. Send a regular service letter or newsletter to all local leaders and encourage them to contribute material for publication.

d. Invite leaders to participate in special activities designed particularly for them and from which they will derive personal satisfaction and growth.

e. Stimulate closer cooperation and interest among parents in the case of club work, and within the community in the case of work with adults.

f. Provide a maximum opportunity for training in methods, teaching material, and approach to the local leaders' job.

g. Encourage local leaders to capitalize on the interest of the group.

h. Personally commend their initiative and express appreciation for work well done.

i. Stimulate expression of appreciation from neighbors.

5. Avoid overloading leaders.

a. Responsibilities should be enough to maintain interest and zest without becoming burdensome, for example, attendance at a regular weekly meeting over a long period of time tends to be burdensome to most people. When club work or other work requires such attention, attempts should be made to provide an apprentice or assistant local leader.

b. Do not ask for too many, or too complex, reports and records.

c. Provide a period at intervals and, especially once a year, when the local leader is not expected to carry any responsibilities. This

may well be at the time of year when the farmer or homemaker is exceptionally busy at home.

6. Organize the program carefully.

a. Be sure that each leader knows his place in the organization.

b. Having explained the job to the local leader, expect him to function.

c. Avoid duplication or confusion in assignments. It is discouraging to anyone who has been told his own work is important and is proceeding to do the job to find that someone else has the same assignment, or that the instructions are confused in any manner.

d. Be sure the leader is adequately prepared.

(1) Give him advance information.

(2) Give him material for distribution or establish a procedure which is easy to follow.

(3) Have occasional get-togethers where leaders discuss their common problems and have practice in discussion and leadership methods.

7. Arrange for public and official recognition for leaders. Not all of the following devices need to be used in any particular case but each has its place.

a. Letter of appointment.

b. Identification card.

c. Button with an official insignia.

d. Certificates for combination of requirements, training, or other achievements.

e. Make presentation of certificates or other rewards a public occasion of importance. Do not invite the leader to a dinner at which he is to receive a reward for services and make him pay for his dinner. He may be better able to pay for his dinner than the organization he is serving, but it certainly detracts from his estimation of the importance of the work he has done.

f. Letters of appreciation from county, state, and national officials.

g. Mention leaders' names at meetings, in news articles, circular letters, and radio talks. Provide a place for the name of the leader on the letter he distributes.

h. Know the names of local leaders and use their names in addressing them.

i. Prepare occasional success and news stories for local papers, using photographs when possible.

j. Reprint magazine or news articles about local leaders.

THE 4-H AWARD OF THE

SILVER CLOVER

Is hereby presented to

in recognition of five years of 4-H Club leadership by the Cooperative Extension Service, U. S. Department of Agriculture and ______

______ STATE EXTENSION DIRECTOR

M. L. Wilson DIRECTOR OF EXTENSION WORK

______ STATE CLUB LEADER

Date ______ 19__

Figure 20. Presentation of awards at public meetings to recognize periods of leadership service is one method of maintaining interest.

Tenure, Rewards, and Satisfactions

We have seen volunteer leaders accumulate experience, skill, and prestige over a period of years. For this reason certain advantages result when leaders have several years of service, for example, six years instead of two. When the period of service extends over many years, however, it is assumed to be a healthy condition if the leader moves on to larger responsibilities. He may still be in the Extension Service. Occasionally a person gets in office and finds the rewards so satisfying to him that he stays on year after year with decreasing value to his organization and community. This is not a desirable

condition. More often, however, the problem is how to hold good leaders. We must begin by understanding what motives brought them into the position of leadership. Often when the original motives are satisfied, other motives must be found to maintain their interest. The leader may have started out from a pure desire to be of

Figure 21. Leadership is both a means and an end in extension work. Regular year-around club programs have displaced short, seasonal projects.

service to the community. A 4-H Club leader may be motivated to remain as leader or to drop out as a result of the response of the parents as much as that of the boys and girls. He may be held for a period by the satisfaction of seeing character growth and development among the young folks. In time his satisfaction may be impaired by the weight of continuous responsibility or the pressure of business or family matters. It is a wise extension agent who notes a leader's signs of strain early and arranges for a helper, some well-prepared program material, an invitation to an inspirational conference, or some recognition or expression of appreciation as suggested above. Perhaps the leader needs a change of work. Larger responsibilities which occur less frequently, such as service on a county-wide committee, may offer a new challenge and opportunity to learn and grow personally.

We must take into consideration all these factors if we are to find and interest successful leaders.

What constitutes successful leaders? It would be easy to get tangled up in general philosophy in this field of human values. Holding to our statement that progress in leadership is made by dealing with specifics, we present two suggested criteria. First, is the leader accomplishing the job which he originally undertook? Second, since leadership is a group mechanism, what desirable effects of the leadership are shown in the group and in the individuals within the group? Strangely enough, leadership development in extension work is both a *means* and an *end*. The rewards for achievement are great.

CHAPTER XVII

Reports and Evaluation

WHEN a fruit cake is cut at a holiday dinner table and everyone takes a taste, there may be a murmur of satisfaction or an outspoken exclamation of pleasure. This is basically the process of evaluation. Again, when a farmer finishes threshing his grain and divides the total number of bushels by the number of acres to get the yield per acre, he is engaged in measuring results. Though this is an important part of evaluation, the whole process of evaluation does not take place until he compares these measured results with his original objective. Perhaps his neighbor got a smaller total yield but a greater yield per acre. This raises a question. What was his objective? Was it to produce as much wheat as possible in total bushels? Or was it to produce wheat at the lowest possible cost per bushel? Was he more interested in yields per acre or yields per man? This illustration shows the difference between merely measuring results and evaluating them, or between reports and evaluation. We shall first consider reports.

The Function of Reports

The process of collecting statistical and other data about a piece of extension work is generally called reporting. The data are usually reported on standardized forms to enable tabulation and analysis. The description of methods and results is often reported under suggested headings for ease in compiling summaries and finding items of interest. Most people assume that reporting is necessary because some superior requires it—to some extent that is true, because generally law and the public interest demand reports. Reports in extension

work, however, are valuable to extension workers themselves. The summary of the work, its organization and analysis, puts the worker in a better position to decide what is needed in the future. It gives job satisfactions which have a surprising correlation to general success.

Let us therefore pass over the otherwise important matter of preparing reports for county, state, and national offices, for these are covered by routine instructions on the job. We are here concerned with reasons why we report, and what can make it easier, more useful, and more interesting at the county level. Let's assume you are an extension worker. You have an official obligation to report the results of your work in such a way as to justify the cost to the public. You also have a personal obligation to report the methods, materials, devices, and results in definite terms which are valuable to fellow workers. True, the report goes to the government, but who is "the government"? Actually the reports are read by supervisors, specialists, and indexers. They study, analyze, abstract, and glean the reports for useful ideas, suggestions, and methods which may be used to improve the work of all agents. The mere massing of facts about activities is barren by itself. How did these activities develop the man, enlarge his vision or ability? This is the difficult end result to measure. In many reports there is a wide divergence between the report and the original program and plan of work. This suggests that much was done which was not planned or was not related to the program. This is natural, but the amount should be kept to the minimum. The reporting process helps to keep divergent activities in check and promotes coordination of program building with daily work and final results.

Suggestions for Reporting

You cannot write a report without the facts. Gathering the facts is the key to success. Do not let the appearance of a report blank control or limit your thinking too much. Keep it in mind as you think through the objectives of your program and then set up a few simple forms for getting the information you need. Some of these

will be filled out by your office clerks, some by you, and perhaps the most valuable ones by rural families or leaders. For an agent it is essential to have a good field record form or slip to use in daily tasks and then to develop the habit of using it. Such record forms should be sorted, completed in the office, and eventually filed. When properly used this system will enable one to handle, with a minimum of worry or neglect, a volume of diverse demands, ideas, records, and requests as they arise in the course of a busy day.

Suggestions for developing other record forms, not routine, follow:

1. Make reporting easy for cooperators and workers by using a few simple questions.
2. Relate questions to your objective and goals.
3. Relate questions to annual report forms.
4. Work out forms with specialists, other agents, or local people as part of the teaching plan.
5. Mark each form clearly as to what it is and who is to fill it out.
6. Print form on good paper, with large type and wide spaces for writing, and provide a blank for date and year.
7. General forms may be used in office routine, but for cooperators use only specific forms for each purpose.

For some extension workers the writing of the narrative report is "a headache." In such a case it no doubt results in more of a headache to the reader than the writer. The narrative report is your opportunity to say what the figures in the statistical report leave out. Get into the spirit of telling the story of what happened. Tell about the interesting things, the human things, the intangibles, the conversations and effects which cannot be added up in columns. When you finish a particular job in the middle of the year, write a summary of it while the events are vivid. Make what recommendations you can about changes for next year. You may find that this paragraph in your monthly report can be used verbatim in your annual narrative to cover this item.

One of the best ways to find out what to put in a report and what to leave out is to read a report of some fellow worker. What did

you like about it? What parts had very little significance to you?

John Marshall, who was virtually the father of constitutional law in the United States, established the practice of writing out the reasons for his decisions. When you come to a conclusion about your work write out the reasons in your reports. You can help establish the principles upon which good extension work is founded.

These are only a few of the many ways to make reporting helpful to yourself and interesting to others. Above all, reports must be truthful and accurate, extending beyond the statistical data to incorporate your conclusions.

What Is Evaluation?

There is need for critical thinking on what is actually accomplished in extension. If extension education produces changes in people, how can we measure these changes in knowledge, skills and attitudes? The annual statistical report form may call for enumeration of activities of extension agents, but these are not evidence of changes in behavior. It may also call for the number of improved practices adopted. This is an excellent measure of progress and is a fair indication that learning took place. Even here, however, people may do things without knowing the reasons why, and the practice may become misused.

In a broad sense the words [1] "evaluation," "measurement," and "appraisal" can be used interchangeably. "Measurement," although sometimes used as a synonym for "evaluation," might better be used for the process of collecting the statistical and other data required for evaluation. More specifically stated, evaluation may be thought of as "a process by which the values of an enterprise are ascertained," or "an analysis by which one is able to understand and appreciate the relative merits or deficiencies of persons, groups, programs, situations, methods, and processes." It is "a method for determining how far an activity has progressed and how much further it should be carried to accomplish objectives."

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[1] Much of this section is based on material presented by Dr. Ralph W. Tyler of the University of Chicago in the Extension Evaluation Workshops held in Chicago, March, 1945, and March, 1946.

Purposes and Importance of Extension Evaluation

The purposes of evaluation are briefly:

1. To provide a periodic test which gives direction to continued improvement of work.

2. To help determine the degree to which the important purposes and specific objectives are being attained and, in the process, to help clarify these objectives.

3. To furnish data regarding the rural situation essential to program planning.

4. To serve as a check on extension teaching methods.

5. To provide evidence of the value of the program.

6. To give satisfaction to cooperators and leaders through an understanding and appreciation of what is accomplished.

Evaluation is an important, integral part of all teaching and program planning work, because:

1. Without appraisal of results we have no sound basis for improving our work.

2. It helps us to identify needs for concentrated effort.

3. It gives us assurance and confidence.

4. It has a value in creating public confidence by giving rational facts.

5. Once we have a means of judging the value of methods or devices, we may experiment with them and have some degree of certainty that we can choose the best.

6. It aids our teaching by compelling us to define our objectives clearly.

7. It shows us whether the tools of teaching can be more wisely chosen.

In Chapter X we said that most extension objectives can be educational with economic and social outcomes or changes. We also stated that the basic objectives were educational. Since we are dealing with a system of extension education, it is necessary to base its evaluation on educational objectives. These objectives must be stated in terms of changes in the behavior of people. Any studies of educational value in extension are concerned with getting evidence

of the degree to which changes in people are taking place. We said there were three levels of objectives and that learning takes place at the level of those which are specific. Evaluation takes place at the same level. Criteria for judging objectives were suggested. These criteria must be applied to objectives to be used in evaluation studies. The importance of clearly defining our objectives can hardly be overemphasized; the wording of them directly affects the kind of evidence we must collect and record.

It is assumed that there must be different kinds of evaluation techniques involving surveys, interviews, anecdotal records, case histories, and success stories, and that rural people and extension workers will cooperate fully, each making his unique contribution to the process. It is evident that such studies might be *informal* or short-time, simple ones. Others might be *formal*, being longer and more systematic, and utilizing the best research methods. Such formal studies may be made by the Extension Service or by an outside agency.

Evidence of Changed Behavior

It is not intended here to give a complete treatise on how to make evaluation studies. It is our purpose to show what evaluation is and how it is done in the hope that its importance will be clear, and that further study will be given the matter through other sources. Mrs. Laurel Sabrosky writes:

> How can you tell that you have made progress or attained the goal toward which your objective was aimed? Education is successful when it has caused a change in the "right" direction. Unfortunately, the human being is a complicated creature, and changes occurring in him are not always obvious to the naked eye. The objective chosen for evaluation, as we have seen, must be in terms of behavior.
>
> Behavior, when considered as the result of education, is usually not in terms of an immediate physical action. It may be in terms of an improvement in skills, a better understanding of a concept, an increased ability to solve problems, a changed attitude, an appreciation of different things, a shifting of values, a change of interests, an adoption of improved practices, an increase in knowledge.
>
> In order to select the types of behavior you will measure, a careful check must first be made of the types of changes of behavior you have

been or will be trying to bring about. This involves a careful study of the teaching—both that which has been done and that which is planned. Different teaching methods or techniques often have as their objectives different types of changes of behavior.

A radio talk may be aimed at producing a desired action or at increasing the knowledge of the listeners. A recipe in a newspaper may be put in for the purpose of encouraging people to use food more economically, tastefully, or nutritionally; both of them may be aimed at teaching the people why this is important. One attempts to bring about a change in a practice; the other to bring about a change of knowledge, attitude, or appreciation. We need to decide which types of behavior we want to measure—only part of them or all of them.

It is easier to measure changes of behavior which have tangible evidences for proof than it is to measure those which have intangible evidences. The fact that a woman has made use of a recipe which she has seen in a paper is easier to determine than the fact that she now better understands the value of good nutrition in child development.

In order to determine the real results of extension teaching, we cannot ignore these intangible results just because they are hard to evaluate. On the other hand, when one is becoming accustomed to the procedure of evaluation it is highly desirable that the techniques, methods, procedures of evaluation be learned while measuring those results which are easier to measure, such as practices adopted, or even knowledge gained. When the techniques are mastered, they can be applied to that type of measurement which is more difficult.

Measurement may take place at three points of attainment. First, before any change occurs—the people's behavior before extension has done any teaching. This point from which the people start in their change of behavior is sometimes called the "bench mark."

A second point would be at any step in the progress of the people toward the ultimate goal of the objective.

The third point for evaluation would be to measure the attainment of the final goal of the objective. When you find out if few, some, or all the people have reached that goal, you know whether to retain the objective in your plan of work or to substitute another one; you can find out whether certain teaching methods have been effective or not, and under what conditions.[2]

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[2] Material presented at Summer School, 1946, at Colorado A. & M. College, Fort Collins. Mrs. Sabrosky is Extension Analyst, U.S.D.A.

In planning an evaluation study, after you have determined what evidences you will look for, the time factor becomes important. Changes may take place at once, but knowledge which is evidenced immediately after a presentation of the material may be forgotten soon after. If action did take place there is a limit to the time that we can wait and still expect people to recall what they did.

The Measuring Device

There are numerous devices which can be used to measure progress toward an educational objective. Some of them are as follows:

1. *Value scales* are used to determine the value people place on things and to show what people think is important.

2. *Attitude scales* show how people feel toward things, whether they are for or against certain questions, social facts, or problems.

3. *Opinion polls.* A good illustration is the Gallup Poll, a well-known means of getting peoples' opinions on various questions. The Gallup Poll uses four methods in one survey; one of these might be the simple "yes" or "no" question, another an open, free-answer question, etc.

4. *Knowledge and comprehension tests* are used widely in schools and are familiar to almost everyone. When it is important to find out whether a person understands or can apply certain acquired knowledge, then comprehension must be tested.

5. *Interest checks* are used to find out in what people are interested. Interest preference tests are used in vocational guidance; an example is the Kuder Preference Record. The level of interest may be checked by what are termed paired lists of activities or topics.

6. *Skill or performance ratings* are used to determine the amount of skill attained. They may show how many or to what degree skills have to be acquired. They can easily be biased by the reporter, but there are ways of keeping the bias to a minimum.

7. *Adoption of practices.* This method is much used in extension to find out merely if certain things are being done, by whom, how many, and how often. It has the weakness that the correct use of the practice or the comprehension of it is not measured.

8. *Case-History* technique is used a great deal in extension evalua-

tion. One individual, farm, or club is studied in detail and reported. Closely related to the anecdotal method, this is a very effective way of reporting results.

There are five criteria which any of the devices above must meet to be fully effective. (1) Validity. Does the device measure what you think you are measuring? The measurement may be a record of facts or a record of the action or behavior of the person, i.e., what he actually did. (2) Reliability. Is the sample large enough to enable you to draw conclusions? Will the test mean the same thing when repeated with many people? Is it trustworthy? (3) Objectivity. A test is considered objective if the results from it are not influenced by the differences in people who administer or interpret it. (4) Practicability. Is it practical to use and summarize the device? Time, money, and available labor must be weighed against the probable value of the results. (5) Simplicity. Keep all forms and techniques simple. Make them easy to use, easy for people to understand, and easy to summarize.

The mechanical construction and the appearance of a questionnaire are important. Make questions short, clear, and concise. Place them in logical order. Provide for understandable answers; avoid using "Don't you think?" or "Do you know?" Allow plenty of space for all written answers. Before proceeding with your survey try out the questionnaire on a few people. This is called pretesting the blanks. Then change the wording or arrangement for the final form.

Sampling Procedures

Selection of a sample determines to a large extent the reliability of your study. A *device or technique is reliable if the result you get is a close approximation of what the true result is*. There is one way to find out this true result—to ask questions: (1) of all the people, (2) about everything taught, (3) in such a way that they know just what to answer. Needless to say, no worker has time to do this. It, therefore, becomes necessary to ask questions: (1) of only part of the people, (2) about only part of the things taught, (3) in such a way that they know just what to answer. We must be content to deal with samples selected from the total number of possible answers.

This selection of the people to question and of the subject matter on which to question is sampling.

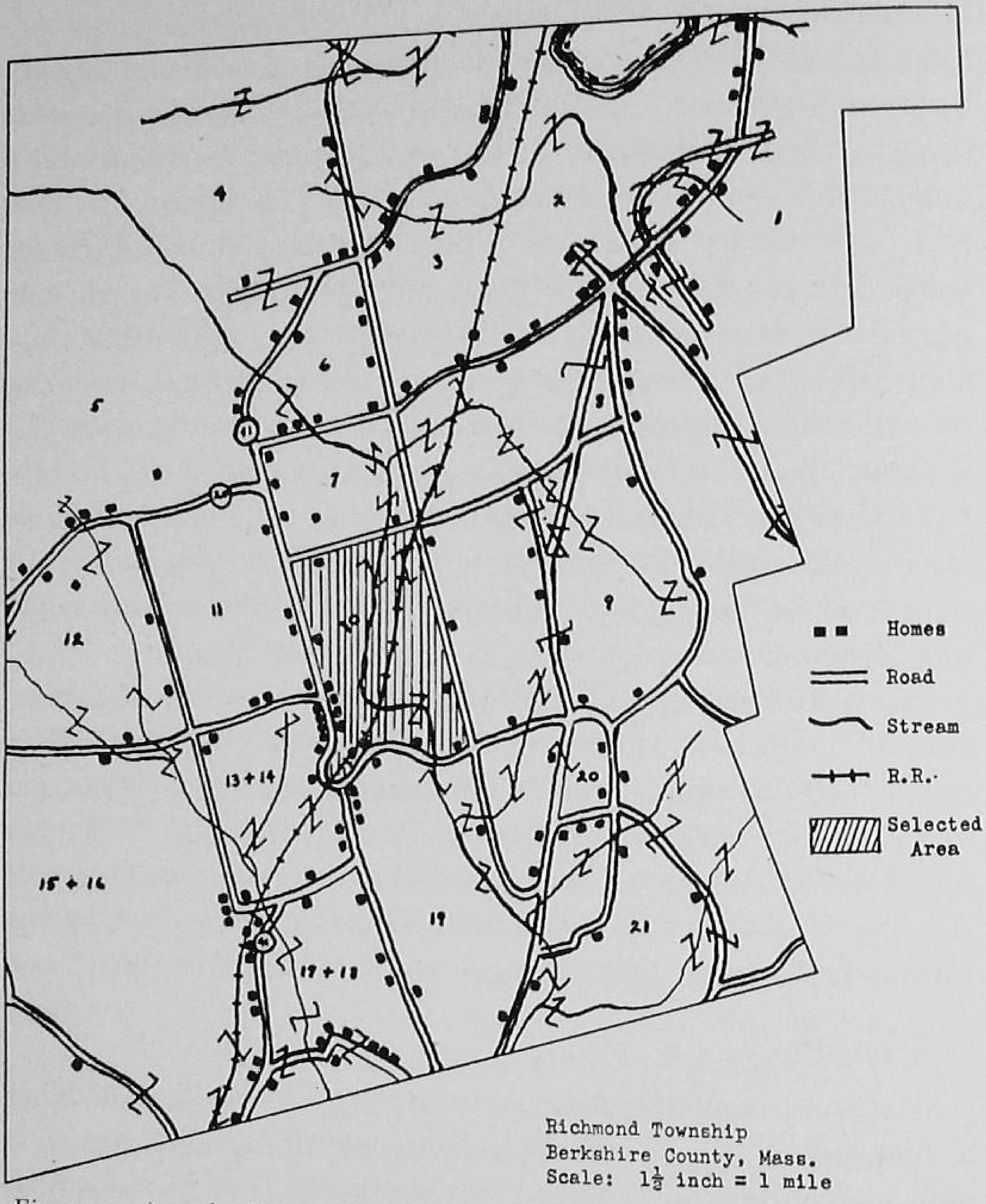

Figure 22. Area-checking map used in the study of organization in Massachusetts. Shaded area (no. 10) is sample segment.

It is not possible here to go into the details of *how* sampling is done. It is important for every extension worker to know that it *can be done*, and what methods are being successfully used. Random selection is one common way of getting a representative sample. Random sampling calls for careful application of rigorous techniques.

It is not just a hit-or-miss method of picking out items or people. Certain types are in use. (1) *Random Number Tables* have been developed which enable samples to be drawn more or less mechanically and without error. These numbers are absolutely at random themselves. Any office list can be numbered and random numbers applied to get a 10-per-cent or 15-per-cent sample. (2) *Alphabetical lists* can be used if they are *complete*. Start with the A's and take every *n*th name until you have as many as you need. If you plan to question 10 per cent of the list, take every tenth name. Occasionally nationality bias enters into an alphabetical list and must be eliminated in some manner. (3) *Block or area sampling* is becoming common. The Bureau of Agricultural Economics of the U.S. Department of Agriculture, in cooperation with the Bureau of Census, and Iowa State College used this method in developing the Master Sample of Agriculture of the United States. Every county in the country was divided into small areas called segments, which had clearly defined boundaries. In the open country these included on the average five farms each. For the master sample one out of every eighteen segments was chosen. The sample thus covers one-eighteenth of the land area, of the farms, of the rural population, and of the families. Area sampling has significant possibilities for county workers who want county-wide figures for reporting or evaluation.

Other interesting and useful methods of sampling are available for those who wish to give the matter some study.[3]

Summary and Use of Data

Without getting into complicated statistical techniques we need to point out a few simple facts about the use of data when they have been gathered. Of course it is presumed that serious thought was given to what use would be made of the data when the survey was originally proposed and the questions were made up. Definite plans for the use of the information collected should be completed before the summarization begins.

The first step in summarizing is to edit the schedule forms, correcting or allowing for any inconsistencies or incomplete answers.

[3] See References at end of this chapter.

Sometimes certain values must be computed before tabulation begins. Tabulation consists of listing or grouping the answers from all records or groups within the sample, so that a summary can be made. For our purposes, these summaries will result in totals, subtotals, averages, and simple percentages. One of the more simple methods of tabulation is the *tally sheet*. It consists of making a sheet on which are listed the possible answers down the side. Then across from each possible answer, one tally mark is recorded for each record which gave that answer. Subgroups may be used. This is a valuable method for tabulating a small number of records. Its greatest disadvantage is the likelihood of error and difficulty in checking for error. There is no identifying of any tally mark, and errors or omissions are very difficult to trace. *Hand sorting* consists of counting without tallying. Records are sorted in piles before counting starts. This method is even more liable to error than the tally method. It is best used when the record is a small card.

Typewriter tabulation combines tally sheet and hand-sorting methods with the use of the typewriter. It is not so fast but is much more accurate. In fact, it can be as perfect as human work ever is. The tabulation sheets are generally set up with the answers across the top of the sheet. Typing is easier across the page. Each record has a line across the page, with its name or identifying number at the left edge. Records are sorted into desired groups for comparison before tabulation starts. The subtotals are added to get the grand totals, and complete the summary. This method is practical, accurate, and within the means of any ordinary office force.

The information obtained for the summary may be used in four principal ways. (1) *Incorporated in the text.* Data which is used in the narrative has the advantage that interpretation goes along with it. Many people do not read tables or charts easily. On the side of disadvantages, if you have a large amount of data, it becomes tiresome. (2) *Tabular form.* This means putting the data into tables or lists neatly arranged. For the general public only the simplest tables are useful. Make them clear. Do not put too many ideas in one table. Put items or figures to be compared close to each other. Put the most important columns near the front or left-hand edge. Each caption

and heading should be written out fully. Make clear what is the base of a percentage or average. (3) *Graphic presentation.* Many kinds of graphs, charts, and diagrams can be used. The simplest and clearest are the best. Bar charts are easier for most people to see than figures, provided they involve only one dimension. Pie charts help to show component parts well. Pictorial diagrams are interesting to read if facilities are available to make them. The simple curve diagram on an axis must be used sparingly with the public. These are used primarily for showing time series, such as progress over a period of years, or frequency distributions. More about types of visual aid is found in Chapter XXV.

Contributions of Evaluation to Program Building.

The process of evaluation has a direct bearing on good program building. All the above steps of measuring, sampling, summarizing, etc., are interrelated, and changes at one point may require changes at another. Evaluation makes certain direct contributions.

1. Evaluation helps to establish a "bench mark." The first principle in program building is to get the facts about a situation, and the first measurement in evaluation must be taken at the point where people start or just before the teaching process begins.

2. Evaluation shows how far our plans have progressed. Studies of extension work have shown that it often takes years of constant teaching to obtain general adoption of practices. If a practice is really good, we should push it until it is well established, but we should be careful to stop at that point and take up new ones.

3. Evaluation shows whether we are proceeding in the right direction. It helps to test our objectives and to recommend changes where needed. By its systematic approach it may point out omissions or suggest entirely new directions of effort. It helps to focus work directly on the needs, interests, and desires of the people.

4. Evaluation indicates the effectiveness of a program. After all, the end product of our work is to produce educational or material changes. Any good teaching plan must include the process of evaluation.

5. Evaluation helps locate strong and weak points in any program or plan. Improvements can be made only when we locate the weak points

and make an effort to strengthen them. This applies to both planning and teaching.

6. Evaluation improves our skill in working with people. In program building much skill is required to enable people to have all the facts and arrive at sound conclusions without domination by professional workers. The processes described in this chapter which have to do with the educational values in our work help us to understand *why* we do *what* we do; evaluation makes us more aware of peoples' attitudes, habits, and satisfactions and hence better conditioned to work with them on their own problems.

7. Evaluation helps to determine priorities for activities in the plan of work. As extension becomes more complex, one of its greatest problems is to determine what to do, how much to do, and what to omit.

8. Evaluation brings confidence and satisfaction to our work. Volunteer leaders, even more than paid workers, benefit by the satisfaction they get from knowing what results are obtained. When the evaluation shows a negative result we can then change our work in line with what has been found and proceed with confidence. With the results of evaluation studies, rural people can more intelligently participate in future planning of their own programs.

Evaluation studies measure the effectiveness of methods and show the relative values of different methods. Such studies are the basis of much of the material in Part IV.[4]

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[4] The material in this chapter is from lectures presented in summer schools at Colorado and Cornell in 1946–48 by Gladys Gallup, Laurel Sabrosky, and J. Paul Leagans.

PART IV

Extension Methods

Extension work requires many methods and teaching tools. People are influenced to make changes in behavior in proportion to their contact with several different methods or means. Methods which reach large numbers are the so-called mass media. Smaller numbers are reached by group activities. The personal contact methods are very important and effective but are naturally most expensive in time and energy. Extension work could not do without these personal contacts, but extension work is not case work alone. Each teaching device has its place, and they supplement one another. Together they provide the stimulus for interest, desire, action, and satisfaction.

CHAPTER XVIII

Number of Methods Required

AFTER the program has been determined, a plan of work is prepared. This is a detailed, calendarized outline of the methods to be used to obtain the adoption of recommended practices which will reach the objectives of the program. In many counties it really is a monthly calendar which indicates the work that is to be done for a given month. The plan-of-work calendar enables you to make the most effective use of time and to follow the work to a successful conclusion. The preparation of a plan of work requires a knowledge of the psychology and sociology of extension teaching and of the extension teaching methods. We will look into these requirements in the chapters in this part.

How We Learn

People learn through seeing, hearing about, and doing the thing to be learned. Before seeing, hearing, or doing can take place the learner must—

have the thing to be learned called to his attention
be interested
have a conscious desire or want
have an opportunity to act.

To learn readily from another person the learner must have confidence in that person. Learning will occur if satisfaction to the learner results from the above steps.

Since the thing to be learned or done often requires that the learner use new equipment or additional materials, the extension worker must be sure that necessary materials are readily available.

Extension work consists of arranging situations in which the farmer, farm woman, boy, or girl may see, hear about, and do the thing to be learned. The extension worker so plans these situations that the thing to be learned will be easily called to the attention, interest can easily be developed, desire will be created, and opportunity for action on the part of the learner will be at hand.

A review of our teaching situation shows that our classroom is either a county, district, or the state. Our work is done under natural conditions. Our students are the men, women, boys, and girls living within the area in which we work, and they may or may not come to our meeting or read our article. Our subject matter is based upon the findings of the experiment stations of our land-grant college and of the U.S. Department of Agriculture, adjusted to fit local conditions. The tools with which we teach are those methods, devices, techniques, and agencies through which subject matter and information are made plain so that the student can learn. Our success may be, to a large degree, dependent upon the proper selection and use of the various teaching tools available.

Extension Teaching Requires Many Methods

Extension field studies conducted over a long period of years and in many counties show that people are influenced by extension education to make changes in behavior in proportion to the number of different teaching methods with which they come in contact. As the number of methods of exposure to extension information increases from one to nine, the number of farm families changing behavior increases from 35 to 98 per cent. In general, the more ways through which people are exposed to extension information—meetings, demonstrations, bulletins, news stories, radio talks, personal visits, and other teaching methods—the larger their acceptance of recommended practices.

The percentage of families responding increases rapidly as the number of contacts through differing methods increases to five or six. If exposed in five different ways, approximately seven out of every eight families receiving information change their behavior. Therefore, if widespread response is desired, people must be exposed to

teaching effort in several different ways. This is but another way of saying that repetition but in a variety of ways is exceedingly important to learning—an accepted educational principle.

The importance of knowing the extension worker personally is emphasized in studies which show that people who have had personal contacts with extension workers have used four times as many practices as have people who have had no contact. The methods used to bring people into personal contact with extension workers are result and method demonstrations, small discussion groups, office calls, correspondence, and telephone calls. Home agents especially give many demonstrations and lead discussions with many small groups; it is one of the most important means of becoming acquainted. Farm and home visits are comparatively expensive in time and money; they are, however, the most basic of all extension methods. The extension worker should know people and conditions. He must have confidence that the practices and ideas which are recommended will work under everyday home, farm, and community conditions. The people should know and have confidence in the extension worker. The personal contact methods help to build this needed confidence.

Demonstrations that show results under practical home, farm, and community conditions are thus local proofs in the community of good practices adopted. Such result demonstrations also furnish cost data and help the agent keep in close contact with local conditions. A demonstration conducted with one family or with one community is limited from the standpoint of reaching large numbers of people. Other methods must be used to get the results before a satisfactory number of people. News of a successful result demonstration spreads from neighbor to neighbor.

Personal, Group, and Mass Approach

Methods which provide for personal contact between people and extension workers account for about 17 or 18 per cent of the total influence of all extension methods. They also furnish the confidence and information on which recommendations made through other methods are based.

Methods through which groups of people are reached produce

about 25 per cent of the total influence of all methods. These are general meetings, method demonstration meetings, leader training meetings, extension schools, and study courses. Meetings motivate

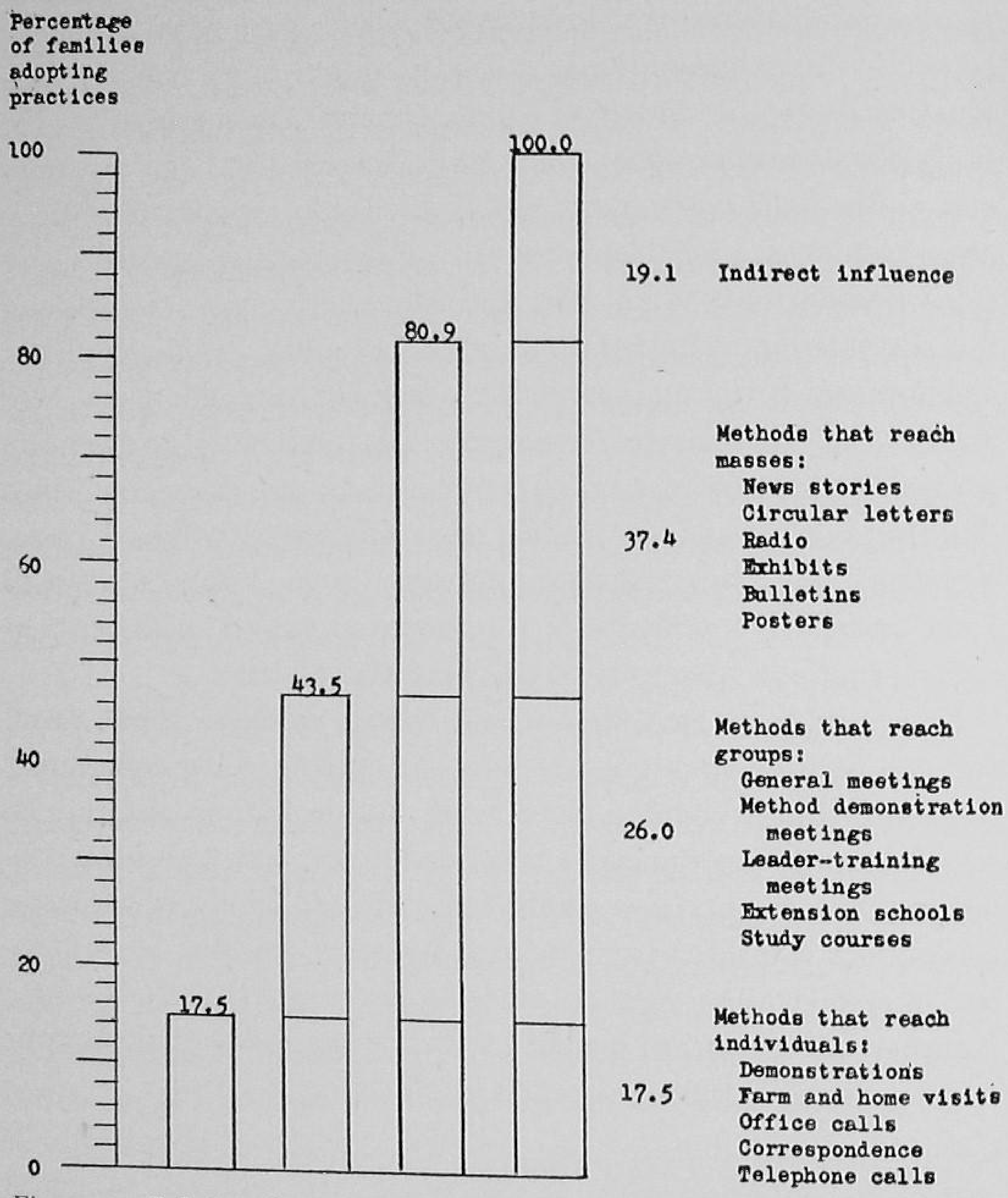

Figure. 23. Relative effectiveness of different types of extension teaching methods.

the four best ways of learning: seeing, hearing, discussing, and doing. Meetings in local situations promote personal acquaintance with demonstrators and the people attending. Discussion meetings are especially valuable for program planning and for dealing with such topics as public policy.

Each county extension service has a small professional staff. This staff, considered as consisting of teachers, has from 10 to 40,000 potential pupils—the rural population of the county. This means that methods must be used which will enable the extension worker to contact, either directly or indirectly, large numbers of people. Such methods, requiring news stories, circular letters, radio, exhibits, bulletins, and posters—sometimes referred to as mass media—account for about 38 per cent of the total influence of all methods.

Indirect influence—neighbor to neighbor, talking and visiting, observing things along the road—accounts for about 19 per cent of the total influence. Indirect spread of improved practices from one person to another shows the effect of satisfaction and confidence.

These results are shown as percentages in the chart in Figure 23. These percentages are based on what the people surveyed told interviewers as studies were made in many counties and states. This chart indicates the cumulative effect of using all methods. Said in another way, to do a good job of extension teaching requires the use of all methods. A personal contact is made through an office call or farm visit. A leader is visited. A demonstration is established. A meeting is held to discuss the demonstration. The meeting is advertised by circular letters. A news story is written on the results of the demonstration as seen at the meeting. These happenings and results are broadcast over the radio. Pictures are taken and a "slide story" is shown at a meeting. One method helps another, and many of them are used in combination to repeat the story.

How to Select Teaching Tools

In extension work the community, the farm, or the home is the setting. The materials are the everyday objects. Possibly a personal visit by an extension worker to a farm or home represents the ideal learning situation. But many factors enter into the selection of extension methods. Strictly speaking what we call *methods* are often *tools* which we may apply in different ways. Basically the individual-contact methods furnish the most direct opportunities for influencing people. All the other methods of group and mass procedures are dilutions or compromises created by the pressure of necessity. We must

reach more people, reach them more often, and keep down the cost per contact. However, since our studies show that several methods are better than any one method, we are not concerned here with choosing the best, but rather with knowing (1) what all the methods are, (2) what each has to contribute, and (3) what is the best combination of personal, group, and mass media for a specific plan of work or educational campaign.

Other considerations also enter into our thinking. Among them are:

(1) The length of time the program has been under way in the area.

(2) The character and stage of development of the program; for example, result demonstrations may no longer be needed to give proof of practices recommended.

(3) The personality and skills of available workers, both paid and volunteer.

(4) The sex, age, education, motives, and other complex human characteristics and customs of the people to be reached.

(5) General local conditions, such as seasonal work, weather conditions, available meeting places, organization, and leadership.

(6) Financial and other resources, such as equipment, including returns per unit of time spent on the method.

This list is not complete. It is only suggestive of the many items which may be considered in choosing the "kit of tools" to be used. These tools should have flexibility and be capable of easy adaptation to changing conditions. It is important to use the right methods and tools in the right proportion at the right time.

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CHAPTER XIX

The Press

WHAT IS NEWS? You will find many definitions of news. "News is anything timely that interests a number of persons, and the best news is that which has the greatest interest for the greatest number," says W. G. Bleyes. Or, again, news is an accurate, unbiased account of the main facts of a current event that is of interest to the readers of a newspaper. It is well for extension workers to get the newspaper viewpoint. Persons interested in organizations and public service often talk loosely about "publicity." Publicity may be news, or it may not be. As a check on what is news, ask yourself these four questions:

1. Is it interesting to *you?*
2. Will it interest *others?*
3. How *many* will be interested?
4. How *much* will they be interested?

Press and Radio Are Related

First of all, material for press and radio should be factual and well written. Its motive should be sincere.

Secondly, effective press and radio coverage must be intelligently planned. The effective employment of these tools of extension education does *not* consist of scattering half-baked releases anywhere and everywhere in the hope that gullible editors will "peddle your apples."

Newspaper space and radio time are worth money. It is the newspaper's and radio station's product. Accordingly, you have no right to expect newspapers or magazines or radio stations to devote any

part of their product to you unless your copy can compete with other news and information. A cardinal rule is: "*Find out what the editor or radio program director wants and give it to him the way he wants it.*" A subhead to that rule is: "*Never send an editor or station director anything which common sense tells you he doesn't want and will not use.*"

If you expect space in the papers or time on the air, let your copy be informational *news*. And how may you be sure that it is news? Take the facts and arrange them so interestingly that the public will read or listen. The ingredients of a news story are the answers to the questions, "who?" "what?" "where?" "when?" and, sometimes, "why?"

What the Editors Want

Do not wear out your welcome at the editor's desk. Make the editor's personal acquaintance, but never pester him. Write to him, but do not check up on him. Have a story with real news value. Something that happens regularly is not news unless it has some special feature. Do not ask the editor to print your stuff as a favor—let it stand on its own feet. *Good relations with the editor are the beginning of good public relations.*

In a survey[1] of agricultural news used in two issues of 63 daily newspapers from 31 states it was shown that those which employ a full-time, trained farm editor present agricultural news most effectively. Farm editors seek out stories about actual farm experience, play up those of economic importance, and rely mostly upon the extension service, both local and state.

In Arkansas 107 rural newspaper editors were questioned about their preferences regarding extension service news releases.[2] They wanted stories of individual and group accomplishment and achievement by farmers and farm women. More than half wanted mats to illustrate extension news. A majority preferred to get the news they publish from the county extension agents. Articles of one typewritten page in length were preferred to longer ones.

[1] W. B. Ward, Bulletin 12 (processed), Univ. of Wisconsin, College of Agriculture, Dept. of Agricultural Journalism, Madison, 1942.

[2] Extension Studies Series No. 1 (processed), Arkansas Agricultural College, Little Rock, 1936.

State-wide Extension News Service

Most of the land-grant colleges have extension editors whose business is, among other things, to set up a regular service of news for the press on a state-wide basis. Usually a well-balanced flow of copy goes to dailies and weeklies, consisting of announcements, informational news, human interest stories, mats with captions, feature stories for regular pages, and a wide variety of service known to be most acceptable to the editors of the state. In addition, feature articles are prepared for special issues or pages of the newspapers. This material is directed through the county extension office or with the knowledge of the agents to certain areas or papers selected because of types of farming, reader interest, or other reasons.

One of the most useful devices for you as a county extension agent is the fill-in article. Such articles are usually prepared at the college, mimeographed, and sent to you where certain local details best known to you are filled in to localize the application of the information or announcement. The fill-in article saves your time. You may simply fill in the blanks or rewrite parts of the story and retype the article. You may prepare it in different ways for dailies and weeklies or for different parts of the county. Such a story may contain some basic information, teaching, or recommendations, such as methods of canning fruit, feeding livestock, or controlling insects. This basic material may have general application, but after it has been localized it is much more interesting to the public and hence more acceptable to editors; it may also be more accurate and useful locally. Stories coming from the colleges and experiment stations are usually but not always based on findings at these institutions. However, the extension service has many cooperators, and success stories of farmers, homemakers, and 4-H Club members furnish the finest kind of news releases to show the value of recommended practices.

News Service in the Counties

Assuming now that you are the county extension agent, what and how much do you write for the press? This depends on a number of things. Do you like to write? Do you take time to write all that you would like to? Do reporters "cover" your office? Is there someone

whom you can get to write news articles for you? These and many other considerations enter into the decision as to how local press service is handled in a county office. Studies show that farmers and housewives like to read "the advice of the county agent" or the "weekly county agent notes." A high percentage of the readers of both dailies and weeklies say they read such material. They also like stories of local cooperatives, local group action, reports of tests, and result stories of all kinds.

There is a tendency on the part of county extension agents to send the press a high proportion of announcements as distinguished from news and information. Of course, under a broad definition of news, announcements are news. But you must not give the editors the impression that you are more interested in using the press to get attendance at meetings than you are in providing a dependable source of result stories about what actually happened, or of human interest and success stories about local people.

To have material for writing the best type of local news about extension work, you train yourself to be news-conscious. You must have an eye for a good story. Use the field record slips or records we described in Chapter XVII to furnish the details, such as names of people, places, what was done, and all the news points of interest.

Carry a camera in the car and become picture-minded. Learn to see a story in a picture. Take careful notes to go with the picture.

Since local names and activities constitute the backbone of news it has been a successful practice to ask certain key people to act as community reporters. Sometimes this material goes out to weekly papers signed by the reporter. Generally, however, reporters of this type gather the facts, and stories are written or given to the press in the usual news article form.

News Writing

The use of news material by the papers depends very largely upon how that material is presented to them. There are certain elements of skill or technique in both the mechanical and the literary style.

On the mechanical side, the news should be written plainly with a typewriter or mimeograph, on only one side of the paper, double-

or triple-spaced, never single-spaced. Each article should have a definite sign at the end to show that it is finished. If news headings are used, they should conform to the general style of the headings of the papers to which the material is going. Sometimes it is preferable not to write a head but to present a word or two which would tell what your article is about, and to leave a space of at least three inches so that the editor may insert the type of head which the style of his paper demands.

Put the name, address, and telephone number of your organization in the upper left-hand corner. Place the release date, or "Immediate Release," in the upper right-hand corner.

On the literary presentation of copy, the rules are simple. The first sentence should give the most important facts and should answer the questions "who?" "what?" "when?" and "where?" Let your first paragraph summarize important facts of the story, with the climax put first, not kept till the last. Always remember that the reader's attention must be caught in the first words. Choose the most unusual point to emphasize in this paragraph. Omit details which have no interest to the public. The succeeding facts should be put down in the order of their importance, and the article should be stopped before the least important are included. The A B C's of good news writing are *accuracy, brevity, clarity.*

Your attitude is important. You should place yourself in the position of being a correspondent for the paper for which you are writing and should write from the point of view of the readers of that publication. Use only such words as are used daily by the readers. The style should be simple, plain, and clear (see Chapter XXII).

Cut your article into many short paragraphs; keep one idea and its development in each paragraph. Keep in mind that the last sentences or paragraphs may be cut off when the paper is made up.

In general, try to personalize the news and appeal to human desires to increase income, avoid losses, reduce costs, safeguard health, improve the home, serve the community, and give better opportunity to children. Avoid the essay style with its long introductions, statistics, tables, and preachments. Outlook stories—forward-looking information of all kinds—are acceptable. Remember, news is what

the public is interested in and not simply what appeals to the writer.

Do not let your feelings be hurt if the editor changes what you write. After all, he is the editor and presumably knows what his paper can use. Your story to him is only one of many, and it may have to compete with murders, politics, fires, and disasters.

Interviews with Reporters

If you are telling facts to a reporter who will write an article from what you say, keep the following suggestions in mind:

1. *For the reporter's sake as well as your own, don't bore him with every small detail relating to the subject. Give him the main facts.*

2. Don't load him down with printed material on a subject unless he is writing a magazine or lengthy feature article and wants full details.

3. At times, you may decide that the reporter should have certain information "off the record" to provide him with background. But be absolutely sure there's no misunderstanding and that the reporter knows when you speak or write off the record and, what is equally important, when you go back "on the record." This warning applies particularly to a telephone conversation.

4. If you get the chance to check the facts in a story before it is published, don't pretend to be an editor. Confine any suggestions to what you believe are clarifications of the facts you gave, and don't try to pencil in any revision yourself unless the reporter requests it.

5. If you're dissatisfied with the printed story there's probably a reason. It may be you. Don't make the mistake of complaining about it. Perhaps you didn't make your point clear enough. But more likely, the reporter found a more timely, fresh, or interesting angle and used it. That's his job.

6. If there's an *important* mistake in a story you have given to a reporter, be sure to mention it to him at the first opportunity. You don't want the same mistake to be made again, and neither does he. He'll probably make a correction, either in a separate little story or in another story dealing with a similar subject. *But whatever happens, don't incur ill will by complaining to the reporter's superior or to anyone else on the paper.*

A Sample News Article (from the Syracuse *Post-Standard*)

Note the elements of a good news article in the first paragraph:

	HEAVY RAINFALL BOON TO CROPS
WHAT AND WHEN . . . . WHERE . . . . WHO	Cortland—A *heavy rainfall Wednesday night helped crops* generally in *Cortland County*, according to *Irvin B. Perry, county agricultural agent*. The rain has halted haying for a few days, and there is still, he said, a lot of hay to be harvested. Grains, including oats, barley, and wheat, are nearly ready for harvesting and farmers within a few more days will be busy with combines and reapers and binders.
ADDITIONAL RELATED NEWS . . .	Two demonstrations on combines and reapers and binders will be held August 12 in Cortland County. The place for these demonstrations has not been decided upon but will be within another day or two, Perry states.
	Hollis Davis, district agricultural engineer, will assist with the demonstrations. They will be set up as near the center of the county as possible so all farmers can get to them.
	—end—

Sample Fill-in Story No. 1 (note space left for headline writer)

Localize further, fill in, and retype for release. Then send or take to your daily and weekly papers.

(Special to 4-H Agents)

A 4-H dairy demonstration contest will be held at ——— on April ——, according to announcement today by —————, County 4-H club agent.

About —— dairy demonstration teams from ——— County will be participating in the contest which annually precedes the state contests. Boys and girls will be demonstrating the various phases of dairy farm chores in 15 minute presentations.

Purposes of the contest are to encourage 4-H club members to follow approved practices and also to show others how to lower costs, widen the margin of profit, and to produce a higher quality product. Incentive awards totaling $600 have been appropriated this year by ———.

—end—

Sample Fill-in Story No. 2

Fill-in story (special to county agricultural agents) No. 6. Story on the 6-point Fall Milk Program. Localize further and type entire article over again.

From your county agricultural agent Release [date]

[space for headline]

Most spring and summer freshening cows would give 500 pounds more milk if they were given all of the roughage they could eat, according to County Agricultural Agent ——— who spoke today at ———. Mr. ——— pointed out that the time of year is approaching when most cows are short of feed due to poor pasture conditions and he stressed the importance of emergency measures available to dairymen during the next month or two to supply the needed roughage.

According to the Agricultural Agent some —— County farmers —————. [Write in here examples of what you know local farmers are doing to keep cows full of roughage.]

The Agent also reiterated the importance of all the practices listed in the Six-Point Fall Milk Program and urged all dairymen to make full use of each practice. The six points are:

1. Keep cows and heifers full of good roughage this summer.
2. Store some of the best hay for October and November feeding.
3. Feed grain as liberally as possible this summer and fall.

4. Stable the herd before bad weather this fall.
5. Save milk by using a calf starter this fall.
6. Breed for more fall freshening.

—end—

Editorial Writing

An editorial is an article expressing, among other things, the opinion of the writer or of a person or persons in control of the paper. The ideas expressed on the editor's page are part of the editorial policy of a paper. When the editorial primarily interprets and expresses opinions it is generally connected with some important news item appearing currently. Letters "to the editor" or "to the public" signed by individuals are in the nature of editorials whether they agree with the paper's expressed policy or not and are generally printed on or near the editorial page. There is no reason why facts and details should not appear in an editorial, especially to support the opinions expressed.

There is a great variety and range in newspaper editorial writing. Kinds of editorials include those which summarize or review a subject and comment on it; those which are interpretive or judicial, persuasive or argumentative, and are intended to influence the reader's action; those which are essays reflecting an impersonal, analytical approach to the subject; and many others.

Although editorial writing does express opinions, it is actually impersonal. An editorial writer has responsibility because his remarks are taken as the view of a group or institution and in particular of the paper itself. Every consideration of fairness, accuracy, and sound logic is used to hold the respect of the readers. Often both sides of a highly controversial question are dealt with in this manner as they could not be in news articles.

When the extension service has provided some interesting and important news, such as launching a nutrition program or recognizing a list of successful boys and girls engaged in 4-H Club work, it may be the occasion for an editorial in the local papers. Most editors prefer to write their own editorials; but when good relationships exist, it is possible to provide them with facts and background information as suggested in this letter:

Dear Editor:

The 4-H Clubs in your county and throughout this state are planning special observances the week of March 1–7, which has been designated as "National 4-H Club Week."

Since you may wish to say something about the 4-H work in your area, the enclosed background information may be helpful in the preparation of news items or editorial comment. Your 4-H club agent will be glad to supply additional local information, I am sure.

Cordially yours,

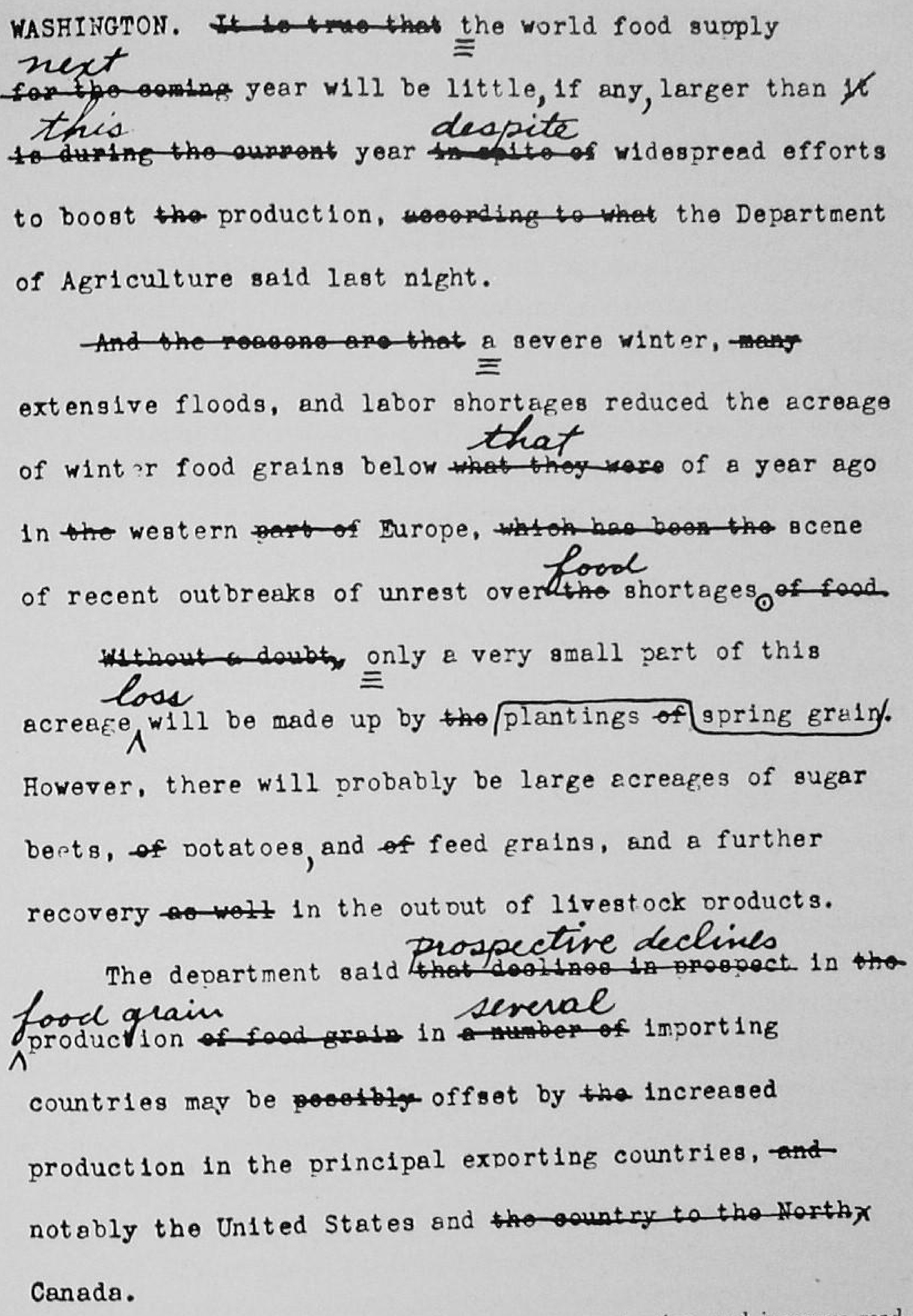
Enclosures

Many country papers like to publish special editions or displays about agriculture at certain times of the year. On such occasions they generally publish an editorial which is a "pat-on-the-back" for extension work—or a brick-bat, as the case may be.

Timing Your Release

A news report of a meeting is news in a weekly paper only in the next issue after the meeting. In a daily it is news only on the day of the meeting or the day following. If a daily has first advantage, rewrite the item for the weeklies to give them a different slant. Since the weeklies come out on certain days this fact may be considered in releasing news to dailies in the same area. For example, a series of meetings is to be announced, and you have a choice of several days well in advance when you will release the first story. Try to release the story to the dailies so that it will come out about one or two days ahead of the weekly instead of five or six days. However, the dailies have a right to prompt release of news about events that have happened, and they would properly resent having such news withheld or delayed.

This brings out the importance of a press calendar. In a county which has two cities with daily papers and seven or eight weeklies, for example, there are various release days to keep in mind. When this necessity is combined with demands for up-to-the-minute news for radio stations, county extension agents find it imperative to make a plan for releasing all material. Such a news calendar should also take into consideration the principal educational campaigns to be



WASHINGTON. ~~It is true that~~ the world food supply next ~~for the coming~~ year will be little, if any, larger than ~~it~~ this ~~is during the current~~ year despite ~~in spite of~~ widespread efforts to boost ~~the~~ production, ~~according to what~~ the Department of Agriculture said last night.

~~And the reasons are that~~ a severe winter, ~~many~~ extensive floods, and labor shortages reduced the acreage of winter food grains below that ~~what they were~~ of a year ago in ~~the~~ western ~~part of~~ Europe, ~~which has been the~~ scene of recent outbreaks of unrest over food ~~the~~ shortages. ~~of food.~~

~~Without a doubt,~~ only a very small part of this acreage loss will be made up by ~~the~~ plantings ~~of~~ spring grain~~s~~. However, there will probably be large acreages of sugar beets, ~~of~~ potatoes, and ~~of~~ feed grains, and a further recovery ~~as well~~ in the output of livestock products.

The department said prospective declines ~~that declines in prospect~~ in ~~the~~ food grain production ~~of food grain~~ in several ~~a number of~~ importing countries may be ~~possibly~~ offset by ~~the~~ increased production in the principal exporting countries, ~~and~~ notably the United States and ~~the country to the North,~~ Canada.

Figure 24. Editing cuts out waste words, improves punctuation, and increases readability. This copy should be retyped before going to the printer.

launched, the seasonal interests of farmers and homemakers, the principal events of the year which crowd the press for space such as election news, and all other factors affecting the orderly and timely release of extension news.

Editing the Copy

In Chapter XXII we give more complete treatment to the need for plain words and short sentences, and the use of personalizing words to hold the interest of readers. All first-draft writing will stand a good editing job to cut out waste words, punctuate properly, keep the rhetoric correct, and aid in a smooth presentation of ideas.

Take a piece of obscure copy and note how the force of the statements is changed by editing (see Figure 24).

CHAPTER XX

Radio[1]

RADIO is another information tool. As with all tools, the use of radio calls for certain techniques. These tricks of the trade can be learned.

Radio is a mass medium of conversation. It can reach large numbers of people at any given time. No matter what station or at what time of day, the audience is larger than at a farm meeting. Even the 250-watt station covers a radius of 25 miles or so, and there is a substantial number of farm families within that area. The potential audience goes up as the power of the station increases. About four out of five American farm families have radio sets. Radio reaches farm people who don't come to meetings, who are not visited, and who do not read newspapers.

You can broaden the sphere of your influence by using radio. Radio isn't going to take the place of meetings, demonstrations, publications, newspaper stories, and personal visits. But it can be the means of increasing the effectiveness of all these other media. It has been used successfully in combination with other extension methods to increase the quantity and extent of learning.[2]

The four principal uses are:

1. To reach large numbers of people inexpensively.
2. To reach people not reached by other means.
3. To stimulate participation through all other media.
4. To build enthusiasm and maintain interest.

[1] This chapter is written in the informal and personal style of the radio. Its material is an adaptation of U.S.D.A. Miscellaneous Publication No. 592 (February, 1946).

[2] *Relative Effectiveness of Three Combinations of Extension Methods in Wisconsin*, U.S.D.A. Extension Service Circular No. 446 (October, 1947).

Radio is an excellent medium for doing extension work in sparsely settled country. Ward County, North Dakota, has one farm family per square mile. Radio was used there to offset travel restrictions during the war.

Properly handled radio may save considerable time. A large number of farm families listen to extension radio programs that have never participated in extension otherwise and perhaps can't be reached in any other way. In addition, among families who do participate, there is a large amount of radio listening; this tends to increase the number of practices adopted. Few people take notes on lectures while listening to a program, although bulletin numbers, addresses, and names are often written down.

Frequently extension workers who have had little or no experience with radio say something like this: "Well, radio takes a lot of time. I'm too busy with meetings and with other programs. Radio interferes with my regular work." It does take time. And it does take work. But it isn't apart from "regular work." Radio is a part of regular work and, properly used, will give added impetus to other phases of work. Radio will help sell your extension program.

Rural People Like the Radio [3]

Most rural people in the United States value radio highly. Most of the families who have not had a radio for five years or more say they would like to have one. There isn't much difference between the farm and rural, nonfarm radio owners in this respect. Women seem to value radio more highly than men. Differences in education, income, and age seem to have little effect on the extent to which rural listeners like radio.

Radio is valued by rural listeners for its two great functions; as a source of news and other information, and as a source of entertainment and "company." Men stress the news and informational values. Among rural women entertainment is more commonly given as a value, but almost equal numbers mention news.

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[3] From a nationwide survey, "Attitudes of Rural People toward Radio Service," U.S.D.A., Bureau of Agricultural Economics (January, 1946).

Station Arrangements

To get on the air, you've got to arrange for a special part of the station's broadcasting time to be set aside for your use. That's not always easy to do. You'll find most stations that cover rural areas are willing to do a public-service job of providing information to farm families. But you'll have to show them you can deliver a program that will hold listeners.

The man to see at the station is the program director—unless the station has a radio farm director or a women's program director. Tell him you'd like to put on a program for farm families. He'll have some ideas, and you'll have others.

You need have no hesitancy in asking for time on public-service, farm and home programs from a commercial radio station. A radio station is licensed by the Federal Communications Commission to serve "the public interest, convenience, and necessity" (Communications Act of 1934). For this reason, if for no other, most stations are willing to present public-service, noncommercial programs. Of course, stations are not required to give any fixed percentage of their broadcasting time to public-service, sustaining programs. The time allotted is a matter for the station management to decide. They don't have to use *your* program. The station may well insist, however, that your program keep up to the standards the station sets for its other programs. Every station likes to hold its audience. It goes to considerable trouble and expense to build that audience.

Working with the RFD's

Many radio stations maintain full-time radio farm directors (RFD's). They're on the air at least once a day with professionally produced farm and home shows. Many of the RFD's have been county agents, vocational teachers, representatives of U.S. Department of Agriculture agencies, or otherwise connected with public agencies. Some stations have women's program directors and include home information in their programs.

If you are within the listening area of a station that has a farm director, you're missing a big bet if you don't work with him. You

don't necessarily have to appear on the programs. The main thing is to get acquainted with the station farm director. He's just like a farm reporter on a newspaper or farm magazine—he's looking for news and information. You can do a real service to rural people and to the radio farm director if you'll keep his programs in mind when you have news to release. When a farmer has achieved some success, or a 4-H Club has done something noteworthy, or the homemakers in your county are working on some particular project, let the program director know about it.

Let the RFD handle the story. He may want to write it up and tell it himself. He may want to bring a transcription outfit to the farm and get the story first-hand on a record for broadcast. He may ask you to bring the people into the station for a broadcast. He may want you to take part in the broadcast. Let him "call the shots"—he knows his business.

When to Broadcast

One major point to consider when starting a new program—or to keep in mind in maintaining an established program—is the time of day. Without citing surveys, here are some fairly safe generalizations.

1. Best time for farm program or farm and home program combined: 12 noon to 1 P.M. (perhaps as late as 1:30 P.M.).
2. Next best: between 6 A.M. and 7:30 A.M.
3. Poor for farm, but satisfactory for home: midmorning or midafternoon.

Whatever time is agreed upon, there should be mutual understanding between the broadcaster and the station that the time will remain constant and not be shifted around on the schedule, at least for a definite period.

Noontime is hard to get. It's easily salable commercial time. But it's well worth trying for. Early-morning time will provide a satisfactory farm audience. Many farmers have radios in the barn. You may be able to reach the family at the breakfast table. It's almost impossible, however, to get farm people to a radio station in the early morning to appear on the broadcasts. Transcriptions or wire record-

ings are useful in overcoming this handicap. The majority of farm programs are in the early morning; it's relatively easy to get time in that part of the day.

Midmorning or midafternoon is all right for strictly home programs because homemakers are available during those hours. Homemaker programs will carry information of value to the city housewife as well as to the farm women. The youngsters are off to school, and the homemaker is ready to take a breath or two.

Evening time, of course, provides the largest audience of farm people as well as of others. But it's seldom available, especially on network-affiliated stations. And farmers, like everyone else, would rather be entertained than educated after a hard day's work.

Length of the program is another consideration. Radio stations commonly divide their time into 15-minute units. Probably that's the best length to shoot for. Some farm shows are half an hour long, but these usually include music or other features and take more preparation, production, and showmanship. Even in 15 minutes there's plenty of opportunity to exercise showmanship. Some agents have a 10-minute program to precede or follow a 5-minute general news round-up.

How Often to Broadcast

It's impossible to lay out a blueprint on how often to broadcast. That must be worked out to fit local conditions. Most agents don't have time to do a daily show. But the ones who are really adept at radio, who use it as one of their major tools, and who have the right set-up, find that the daily program pays big dividends. A regular program broadcast builds regular listening habits.

There are several ways to set up a schedule for broadcasting more than once a week:

1. The agents can each take one broadcast.

2. Through the use of transcriptions (when available) or the U.S.D.A. Timely Farm Topics, and mimeographed radio releases, a program can be set up with the station announcer doing the voicing. With the county extension agents alternating on the program this would result in from three to five programs a week.

3. The county agent could arrange with local representatives of U.S. Department of Agriculture agencies to take a day each week. This might result in a daily farm and home program.

4. In many states several counties surrounding a station participate in a round-robin program with a different county going on the air each day. This might mean only once a week for each county. Such an arrangement usually works best when one agent takes the responsibility for scheduling and looking after details.

What to Broadcast

The kind of information and news, the detail into which you will go, the treatment you will give to the subjects will vary with the station on which you broadcast. If you're broadcasting on a 250-watt station, the coverage is probably only your own county. So you can go into considerable detail—you can announce county meetings, and you can talk more in terms of what's happening on the various farms in the county. If you're on a 5,000-watt station, you have to consider that what you're saying will be heard in several counties, and maybe in parts of more than one state. So you may want to point out that information you give is in line with recommendations for your county, and that listeners far from your home county should check with their local county agent. If you're broadcasting on a 50,000-watt station, then you have to remember that people in a much larger area will be listening. However, you're still the spokesman for your county or your state. Build your program and your information and news around the home folks.

You Can Teach by Radio

"How-to-do-it" information is probably the most familiar type. How to cure hay, when to spray fruit trees, what to look for in selecting a 4-H steer, how to adjust a pressure canner or remodel a hat —these are examples. It's good, solid, everyday material.

For the lessons in a radio program entitled "Let's Make a Dress," broadcast from Cornell University, 1,270 women enrolled. Reports were obtained from 400 of them. It was found that 266 had listened

to an average of 11.5 broadcasts out of 15. Dresses were actually made by 181 women, and many others were planned. New ideas were acquired by 135. This seems to be evidence that radio can be used to teach skills.[4]

But you don't need to stop with how-to-do-it information. You'll want to keep your farm families up to date on economic and other background material. You'll want to give them the why of things as well as the how. Radio is a good medium for use of a little philosophy, a good common-sense, down-to-earth reasoning—maybe even to stir up some friendly controversy.

Some suggested sources for programs are:

1. Success or progress of field tests and demonstrations.

2. Successful application by farmers and homemakers of extension practices.

3. Practices worked out independently by farmers or homemakers.

4. Progress and discussion of whys and hows of local extension programs.

5. State college publications.

6. U.S. Department of Agriculture publications that apply to your area. (*Note:* Bulletins should be talked about rather than read from—they are written in formal style. Talking about a bulletin stimulates interest in it and in the subject matter it discusses. The listener can be requested to write for the bulletin. When bulletins are "plugged," the title and number should be mentioned at least twice.)

7. Radio releases from the state colleges; the USDA Farm Flashes (unless incorporated in state college releases); releases from other offices.

8. Reference material: subject-matter books, farm periodicals.

9. Weather and market reports.

10. Local farm and home news; advance notices of meetings, etc.

11. Reports on meetings that have been held.

12. Stories about happenings on individual farms—feature stories —with human interest, locally and from other areas.

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[4] Helen P. Smith, "Success with 'Let's Make a Dress' Radio Program," College of Home Economics, Cornell University (1944).

13. Names make news—use them in stories to illustrate approved practices.

14. Announcements of government programs.

15. Announcements of completed legislation affecting rural life.

Who'll Do the Talking?

When the extension worker is in charge of the program, that doesn't mean he should do all the voicing. A well-rounded extension program should cover both farm and home subject matter. That is, all county extension agents should work on the program—but not necessarily on the same day.

Farmers like to hear from other farmers. A newspaper story can tell how a certain farmer performed a given practice; on the radio the farmer can tell about it himself. It's better to work this out as a two-way discussion than to let him go on alone. He'll have more confidence and feel easier. Use urban people, too, such as bankers, chamber of commerce representatives, packers, and shippers.

Getting and Holding Interest

The two general styles of presentation are: (1) with a written script, and (2) without one, that is, "ad-libbing."

Any consideration of the use of radio time entails a decision regarding the type, or types, of presentation. It's impossible to set out any "best" way. That depends on the persons and subjects involved. For instance, one subject might best be handled as a straight talk, another by a two-way discussion or interview, another through the presentation of farmers, homemakers, or farm boys and girls.

A 13- or 14-minute program—to meet the test of sustained listening—must be divided into segments. Experience has shown that most folks won't listen to a straight talk longer than 6 to 8 minutes. Dialogue will hold interest a little longer, perhaps to a maximum of 10 minutes.

But before talking about the actual segments of a farm and home program—a little more about preliminary organization. Let's select some interest-compelling opening. The station announcer, or the agent, could start like this: "Good morning, folks. . . . Here is [or

"This is"] your county agent, Jim Johnson . . . all set for another of our regular Monday visits. . . ." Maybe this could be varied from broadcast to broadcast. But the initial radio contact with farmers and their families must be forceful enough to gain attention.

Then, once attention is gained, there's the constant need for maintaining interest. We'll assume the subject matter is something of interest to at least a part of the audience. So let's start planning for variety, the one sure way to maintain interest.

Putting the Program Together

For a 15-minute spot—with actual air time limited to 13 or 14 minutes—we might want to have 7 or 8 minutes on a subject-matter message, with the remaining time devoted to county farm and home news. A dialogue or interview could be run for about 10 minutes, with remaining time used for several pertinent and timely "how-to-do-it" items. Remember, weather and market reports should always be used if available.

There are many possible combinations for the desired program segments. But use of any one combination calls for smooth transition from one segment to another to avoid abrupt changes, always hard for the listener to follow. Some tie-in from one segment to the other is usually found easily. The listener needs a mental bridge to cross from one subject to the next. The broadcaster must determine where the emphasis will be placed. If any portion of the program rates as the most important for the particular day and time, that portion ought to come first, with supporting or incidental segments following.

Preparing the Script

Let's assume that you've got the subjects worked out and have decided on the style of presentation. Let's also assume that you've decided to do it from script. Your script may look a little strange when you read it. But if you were to hear it instead of seeing it, it would sound pretty much as though someone were talking to you in a friendly, informal fashion.

Well, the first thing to do is to collect the material. Maybe you've

made notes after a visit in the county. Maybe you've got some additional material from books or from bulletins or from state college releases. Line up all the material you think you'll want to cover in your entire program. Then you can cut and try. You may end with some material unused, but it's better to have too much. Be sure to include supporting and illustrative facts to back up your main points.

Then figure out whether you should cover the subject by a straight talk or two-way discussion or whether you want the station announcer to interview you.

Style of Presentation

The big thing to remember is *that when using the radio you are talking to people.* Over the mike you'll be talking to one of your farmer friends, say Ed Smith, as if you were sitting in his living room. Keep in mind though, Ed's wife, grandpa, and the kids are listening too—talk to them.

If you have only a few minutes to talk with someone, you don't try to tell all you know. You put forward a very few facts. You try to make them clear and to be sure that the person listening to you understands what you mean. You'll repeat some points. You are friendly and sincere. You probably smile once in a while. It won't hurt to smile in broadcasting—that smile will show up in your voice. Let humor appear naturally, without forcing it.

When you're talking to one or a few people you usually talk on a you-and-I basis. So you do the same thing in radio. If it seems out of place to say "you" and "I," then use the third person or the plural—say "him" or "his," or "our," or "we." The main thing is to make it personal.

If you're using dialogue, make sure that the transition when you stop talking to the person with whom you're broadcasting and start addressing the radio audience is conspicuous. You throw in examples, illustrations, personal experiences, anecdotes. Maybe you put a light touch here and there, even a wisecrack. But if you try to say something funny, make sure it sounds funny when you say it. Throw in a chuckle now and then, if you can make it sound real.

You're careful not to use a lot of figures, because most folks won't

remember them anyhow. And as for quoting a statistical table, that's out of the question.

To help the listener get acquainted quickly with the speakers in a dialogue, it's a good idea to use the names rather often, especially in the early part of the dialogue. Use first names or even nicknames, unless you feel that the position of the speakers requires the formality of titles, such as "Mr." or "Professor" or "Doctor." (Use the latter two very sparingly.)

Don't frame questions the listener knows you know the answers to as well as the guest speaker does. For example, it just wouldn't make sense to have a county agent interviewing the state director of extension and asking a question such as, "What is the purpose of cooperative extension work?" The county agent knows the answer, and everyone knows that he does.

Don't follow an answer with an unrelated question; you may repeat the significant part of the answer, comment on it, and then follow with another question suggested by the previous answer. Avoid long, literary statements. Don't be afraid to stop; go back and repeat or amplify.

It's well to end with a summary of the points you hope your listeners will remember or act upon.

Little Things That Count

Anything to read should be clearly typed and double-spaced. Keep your voice down to the living-room level. Take your time, but don't let the program drag. Talk along at a normal rate. In ordinary conversation you change pace once in a while, and it's a good idea to do that with a radio talk. Slow down a little when you want certain statements to sink in; then speed up a little until you get to the next significant statement.

See if you can't make arrangements with the station to cut a recording of your own voice once in a while. Let the station program director check the playback with you, and get his criticism as well as your own.

If you're putting on a dialogue pick up the cues promptly. If you're supposed to interrupt another speaker, make it a real inter-

ruption—start your speech before the other fellow has come to the end of his.

All persons on the program should present themselves at the radio station well in advance of the time of the broadcast.

At most stations the engineer will want to get a "level check," so he can find out how to set his controls and where to have speakers stand or sit in relation to the microphone. A little additional time before or after the program will be spent to advantage talking with the program director, production men, and announcers.

If you want a microphone moved, ask the engineer to do it. If he tells you to go ahead and do it yourself, that's all right. But ask him first.

It's not etiquette to talk in a radio studio while someone else is broadcasting. When the time comes for you to talk, get into the position indicated for you in front of the microphone and just start talking in the same friendly, conversational tone you always use. Keep in mind Ed Smith and his family sitting in their living room, with you sitting there beside them, having a friendly chat about your subject. Don't turn your head from side to side. That makes your voice fade as it comes through the microphone.

Of course, many programs are flexible, so that one or two minutes' difference in time won't matter. Concentrate on getting your message across clearly and conversationally. And don't worry your guest about the time.

Never overdo your enunciation and articulation. A little experience and some friendly criticism should let you know whether you're mumbling or talking too fast to be understood, or whether you whistle on your "s's." Iron out those flaws before you go on the air; don't worry about them during a broadcast.

Relax before the Mike

It's important that you feel free and easy in front of the microphone. Perhaps you feel more comfortable when sitting down. If so, sit. If you feel easier in a standing position, stand. But in either position, relax. Just be friendly and sincere.

To help inexperienced broadcasters, you may:

1. Rehearse in front of the mike. This gets the guests used to it.

2. Tell the guests to imagine they're talking to only one person or one family seated in their living room.

3. Tell the guests practically all of the people you have on your program have never faced a mike before—at least not regularly. You might say, "Did you hear the swell job Bill Brown did last week? He'd never seen a mike before."

4. If you're ad-libbing from an outline, you keep the outline but don't give the guest one. It will distract his attention. Have him sit or stand across from you and look and talk right to you.

5. Don't scare the guest with too much mumbo jumbo. But you might tell him that if he has to cough to point to his neck, and you'll tell the engineer to cut the mike long enough for the cough. Then you may want to tell him that if you rotate your finger, that means to speed up a little. If you stretch your hands apart, that means to go slower. Be careful with these, however—they'll confuse some people instead of helping them.

6. Try to get the rehearsal over early enough so you can relax with the guests before you go on the air. Appear nonchalant yourself and unhurried.

Ad-lib Presentation

Venturing into the realm of radio ad-libbing—talking without a complete script—may appear formidable to the beginner. Yet actually, just talking is probably one of the easiest ways of putting across a radio message. And few people will argue that this style of presentation—when it's well done—does not generally result in a program easier to listen to.

Although ad-lib broadcasts provide an easy-to-hear, easy-to-present program, the organizing of information offered during any given time must be carefully done. Here again, the old rule of "first things first" comes into play. Inexperienced ad-libbers have the tendency to talk too long on one or more subjects, only to discover too late that allotted time has been consumed with only a part of the information covered.

A time-honored tool for organization of your thoughts is the out-

line. For the straight talk, the outline need merely consist of a series of words, reminders for referring instantly to mental sources of the subject under delivery. Or the outline can serve as a guide to the use of typewritten, mimeographed, or printed items.

Figure 25. Usually a group broadcast calls for a preliminary meeting of the participants. It is important to feel free and easy before the microphone.

An elaborate outline will probably serve best where several people are going to take part in a broadcast. Sometimes the discussion leader is the only one who has to have the outline before him. For we're assuming that some sort of rehearsal is staged where groups of people are participating in a program. A rehearsal will serve to unite the thinking of all members of the group and to give the discussion leader some idea of the amount of subject-matter coverage during the time available.

Probably the best method of preparing for a group broadcast calls for a preliminary meeting of the participants. During the session, individuals give their views on the topic to be broadcast. The ideas are assembled by the leaders, who will use this ammunition for preparation of the outline. Usually one additional rehearsal—not

including a quick studio "warm-up," perhaps,—will be enough to weld the two or three or four people into a workable panel for presentation of the radio feature.

Some important faults to avoid when conducting an ad-lib interview: Too frequent repetition of the remarks made by the guests; too frequent use of such supporting words as "fine," "swell," "wonderful," or "dandy"; hesitancy on the part of the interviewer to start talking just as soon as others stop.

A broadcaster who regularly talks with farm people or with extension workers will develop the ability to formulate questions or supporting statements as the other person is talking. Notes made before the broadcast help.

Transcriptions

The past few years have seen increased use of electrical transcriptions. Surveys show they are not objectionable to listeners. Some small stations do not have facilities for making their own records, but when they are available, transcriptions will help your program. A number of state extension services have started transcription systems.

Transcriptions cut at the station have saved the day in an emergency more than once. It's always a good idea to cut an emergency transcription every month or so—a whole program—and lay it by. If you know you'll be out of town when your show is coming up, you can go to the studio in advance and put your show on a record that can be played on the air in your absence.

On-the-Farm Recordings

Many radio stations have portable recording equipment. Much of it is for making transcriptions on glass- or aluminum-base records. Many stations are now getting wire or tape recorders—portable units that can be operated by station personnel or by the farm and home broadcaster. Although the equipment for field recording was at first largely owned by individual stations the state extension services and U.S. Department of Agriculture agencies are purchasing the smaller, more compact film and tape recorders.

Here is a case history of how county agents can have local radio programs without a lot of advance preparation and worry.

Lou Kaiser, head of radio services at the New York State College of Agriculture, was driving in Steuben County with Oren Burbank, the assistant county agent. Conversation turned to the turkey farm of Mr. and Mrs. W. W. Stanton, which Burbank mentioned he had watched grow. That was all that was needed.

With the holiday season not too far away, the two men immediately saw the possibility of getting a broadcast for use by extension workers on what goes on behind the scenes at a turkey farm. Having the wire recorder in the car, they went to call on the Stantons.

The recorder was taken out to the turkey pens where 3,800 White Hollands obligingly furnished the sound effects. After the participants talked things over, Mr. Kaiser began the program by introducing Mr. and Mrs. Stanton and the county agent.

While the turkeys had their say, Burbank interviewed the Stantons informally. They discussed their hatching business, which is still expanding, and the reason their birds are housed on porches and slats, and they described their new hatchery.

Altogether the preparation and recording took only a short time and the Extension Service had a timely program for the approaching Thanksgiving season, or one that could be used at any time to help stimulate consumer interest in turkeys. Mr. Kaiser called it "just one example of the opportunities open to extension broadcasters if there's no objection on the part of the local radio station to the use of the wire recorder."

When technical personnel is available, stations will usually cooperate in making a reasonable number of field recordings by farm and home broadcasters. And if recorders are owned by U.S. Department of Agriculture field agents, the recordings can be made at will. The station on which these recordings are to be used must be able to care for the technical details of transferring the wire or film recordings directly into programs or onto disk records. Check in advance with the station so that the work of making the recordings is not wasted.

An on-the-farm recording can be a cumbersome thing if an at-

tempt is made to use a script. Veteran farm broadcasters have discovered it's far better just to let farm people talk; and the people will do it without hesitation when they're in the farm kitchen or on

Figure 26. On-the-farm recordings are natural; just let the farm people talk. This method is especially adapted to extension work.

the edge of a field of tall-growing corn. But there remains the need for a thorough discussion of the subject involved before the recording is made, as in preparing ad-lib programs.

Relayed on-the-Spot Broadcasts

There will probably be increased use of what the technical men call relay transmitters. The transmitters are usually in a truck or a car and can be used for relaying programs by short wave from a farm to the transmitter of the radio station. Most stations having relay transmitters in mobile units can pick up a farm program or part of a farm program at distances of 20 to 30 miles. Thus short wave will probably be used more and more for on-the-farm broadcasts. Stations will want to check Federal Communications regulations on the use of short wave where telephone lines are available.

Direct Pick-ups in the Field

There is also reason to expect a similar expansion in the use of direct-wire pick-ups. Today such pick-ups—originating at farm meetings or other events and relayed to stations by specially leased telephone wires—are being used more and more. And a look into the future reveals the strong possibility that direct-wire pick-ups will become increasingly popular as a way to broadcast directly from farms. Remember that these remote pick-ups are relatively expensive. Usually, especially for use on individual stations, a field transcription can be used instead of the direct pick-up.

What about FM and Television?

There is no difference in the program procedures of AM and FM stations. FM stations are increasing in number, and their chief advantages are fidelity of tone and freedom from noises. Because of the heavy investments of AM broadcasting stations and of the thousands of homeowners who have AM receiving sets it is reasonably certain that standard broadcasting will continue for some time and will not be quickly or easily displaced. This is especially likely because most programs are available over both AM and FM.

Television is completely novel. It's like seeing your first football game or circus. The technique of broadcasting television is complicated. Experience and training are essential. During the developmental stages, television stations will probably welcome your aid and cooperation. If extension waits to get its experience and offer its help when all the pioneering is over, and the program is solid with other features, it may be more difficult to participate. Television is here to stay. Its simultaneous appeal to both the eye and ear is irresistible. It is probably the best teaching device of all the mass media. As soon as the cost of receiving sets ceases to be an obstacle, you may watch television grow; networks are steadily increasing in number. Rural plays, demonstrations, and incidents are being broadcast successfully.

Because of the cost of receiving sets and the technical limitations in broadcasting, the first audiences have been largely in the cities.

Don't be fooled by the fact that many of the first television receiving sets are in clubs, restaurants, and bars. This is only a passing phase. After all, who is your public? Maybe this is your chance to show the city folks a thing or two about the farm. Show them how to freeze berries when berries are on the market, or how carefully eggs are cleaned, graded, and packed before going to market. With a little imagination, some determination, and a good deal of experience and training, you can make television play an important part in extension work.

Commercially Sponsored Programs

Almost every extension worker may be invited at one time or another to participate in commercially sponsored programs or to provide information to be used in such programs. The policy of the U.S. Department of Agriculture is set forth in Office of Information Memorandum No. 71, dated July 28, 1944.

There are precautions and taboos: the inclusion of an extension message does not constitute an endorsement of a concern or a product and must not be made to seem like an endorsement; neither must the sponsor give the impression that he is obtaining special consideration not available to other sponsors. The Extension Service retains full control of subject matter, without influence by the sponsor or his agents. Employees should not participate in any program that would be embarrassing to the Extension Service.

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Schmitz, H. J. *What Farm People Want from Radio.* Lafayette, Ind.: Purdue University, 1948. Thesis.

CHAPTER XXI

Letters: Personal and Circular[1]

WHEN you have a portrait taken you want the photographer to produce a picture which represents you at your best. Secretly you hope for a little more. But what about letters? How often do you send out letters which show you as careless, untidy, inconsiderate, unappreciative, indifferent, inaccurate, and sometimes even cranky. You draw this picture of yourself and then mail it. You know but you forget that (1) letters are personal, and (2) letters represent you. So be your best self and write as you talk.

You Can Write Better Letters

1. *Put yourself in the other fellow's shoes.* If you had him in front of you, it would be easy to see whether he was happy or sad, busy or at leisure, and ready to listen or distracted. Years ago Charles R. Wiers told the extension workers of New York State that "when you dictate a letter, you must lose yourself in order to find your customer." Have a genuine concern for the other fellow's interests, viewpoint, limitations, and desires. Is what you are writing about something absolutely new to him? You must give interest to get interest. If you would be interesting, you must be interested. Ask yourself, what would I think if I were in his place?

2. *Be your best self.* Remember your photograph—be at your best. This will help to bring to your words a sympathetic understanding,

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[1] This chapter is written in the familiar style here recommended for circular letters. Parts of it are adaptations of *Effective Extension Circular Letters*, by H. W. Gilbertson (U.S.D.A. Miscellaneous Publication No. 403, 1941).

a desire to serve, to be fair, to be patient, to be and do all the things which you would have the other fellow be and do for you. I could be myself and write an angry letter, but my best self would consign the angry letter to the waste basket, and after a cooling-off period a far better one would be written.

Mr. Earl Atwood
Boville
New York

Dear Mr. Atwood:

The roots we obtained in your field across from your house some time ago are from the weed called Spreading Dogbane. This is a native perennial weed. Once established, the plants live on from season to season, like dandelions.

The most practical means of control is to plow deeply and keep the area in cultivated crops until the roots are starved and send up no more shoots. The weed may be killed by the use of sodium chlorate on small areas. Perhaps your area is small enough to use this treatment.

I am enclosing a copy of a bulletin entitled "Controlling Weeds with Chlorates."

You can get sodium chlorate at slightly over eight cents per pound from George Bigby, near Constableville, to use next spring.

Cordially,

Paul Clay

County Agricultural Agent

PC:mfg
Enclosure 1

Figure 27. Sample personal letter: note how the first sentence goes directly to the subject; second paragraph gives clear recommendations and is specific; third paragraph calls attention to an enclosure—something to read; last comes a suggestion for action.

3. *Go directly to the subject.* If you are answering a letter, acknowledge it briefly before you begin your story. Make the acknowledgment simple and direct, avoiding the common jargon and stilted phrases. Don't say: "Answering yours of the 1st inst. in which you asked for bulletins which. . . ." It is proper to identify the subject of his letter, but don't tell him all he told you. Don't use "inst." because you wouldn't use it in speaking to him. (If you were to use it, to be consistent you should also use *proximo* and *ultimo* when required.) Don't "beg to reply" or be "in receipt of your favor." Just say something straightforward and natural. "I have your letter of June 20th asking for bulletins." Then go directly to the subject. If the subject is new to the recipient, give in one sentence the kernel of the message before launching into the circumstances and details.

4. *Speak clearly.* Of course you are writing, but think of it as if you were in fact talking directly to your friend in person. Don't say anything you wouldn't say in person. Even when you do your best you may still be misunderstood. In speaking you can "smile when you say those words," but in a letter the words stand starkly alone. Use short sentences. Avoid "which" clauses. Use a few well-chosen words. How many times have we marveled at the power and brevity of Lincoln's "Gettysburg Address."

Everyone has a lifetime in which to practice and gradually build better habits of speech. As Mark Adams of Texas says, "Listen to people who talk because they want to say something, not to people who talk to show off. Then write like that."

5. *Be careful.* The habit, in some offices, of hurrying through correspondence loses more time than it saves. If a letter is worth writing it is worth writing well. Do you recall how provoked you were when you wrote someone for information and the reply gave only half the story? You had to write again to get the hour, the place, or some other detail. A few little errors which may be harmless in themselves are an indication that you don't care. Is that flattering to the other person? In writing to someone whom you greatly admired you would doubtless go over and over the letter to make it right. Letters have been known to appear in court against the writer; others have been published after the author's death to show his character

or intent. Once your letter is mailed, it's part of your record. So don't be careless.

6. *Stop when you are through.* Frequently letters show that the writer is afraid to stop; he seems to be casting around for a high-sounding phrase to summarize his words. He may resort to a stilted leave-taking, such as "Hoping this will give you the information you wanted, I am," or some other equally common and futile close. If you want to show a cordial spirit of helpfulness, why not say, "I am glad you wrote to me. Call on me any time I can be of help." Then say "sincerely" or "cordially" and sign it.

These six steps to better letter writing are only suggestive of what may be found by analysis of correspondence and by consulting books on the subject (see *References* at the end of this chapter).

The value of an individual letter is in its personal touch. A personal letter may be considered a substitute for a personal visit. It has many of the values of personal contact and can be used to answer individual requests or to initiate proposals.

The Role of Circular Letters

Circular letters, like personal letters and radio scripts, are more readable, more interesting, and more convincing if they are just plain talk. The role of the circular letter in extension work has constantly grown in importance. Extension workers use circular letters most for sending out subject-matter information. Such letters are often called service letters. The next most frequent use is for sending out notices. Other uses are for organization and program planning.

County agents often feel that the use of the circular letter for announcements is its most important function, because of its influence upon the participation of people in the entire program. Nearly all extension activities and much of the subject matter can be presented effectively through well-planned circular letters.

The preparation of a letter which is to reach 50, 100, or 1,000 people is worthy of much thought and effort. How many of your circular letters are read? How much of each letter is understood? Do you suppose you could increase or double the number read by giving more thought to preparation of them? You can make from ten to twenty

farm visits in a day. With one or two hours of your own work and a half-day of the office staff, using modern machines, you can get out a circular letter to every farmer in the county. Of course, farm visits are necessary, but for reaching large numbers of people circular letters are the most personalized of the so-called mass media. Well-planned circular letters are a quick, effective, and inexpensive way of reaching special groups.

Because of the direct appeal to the individual which a circular letter has, a well-planned message with your personal touch will be found very useful in leadership development. Such letters have been found valuable in dealing with 4-H Club members, local leaders, and cooperators who want seasonal help and suggestions on what to do. Here is a challenge to you to put your personality into words. Can you make the leader want one of your letters so much that he opens it on the way from the mailbox to the house? Will he smile when reading it as he does when you enter the yard? Most of the things we said about personal business letters apply to circular-letter writing.

Planning a Circular Letter

"Why is this letter being written?" The answer to that question is the first essential in planning effective circular letters. Every extension circular letter can be a sales letter to encourage the recipient to want what is being offered. What is the objective? Is your objective to get action, to increase knowledge, to develop good will, or to change an attitude? Your letter must be so well planned and prepared that it will be opened, read with interest, understood, agreed with, remembered, and acted on. After the letter has been worked out ask yourself if it will meet these essentials.

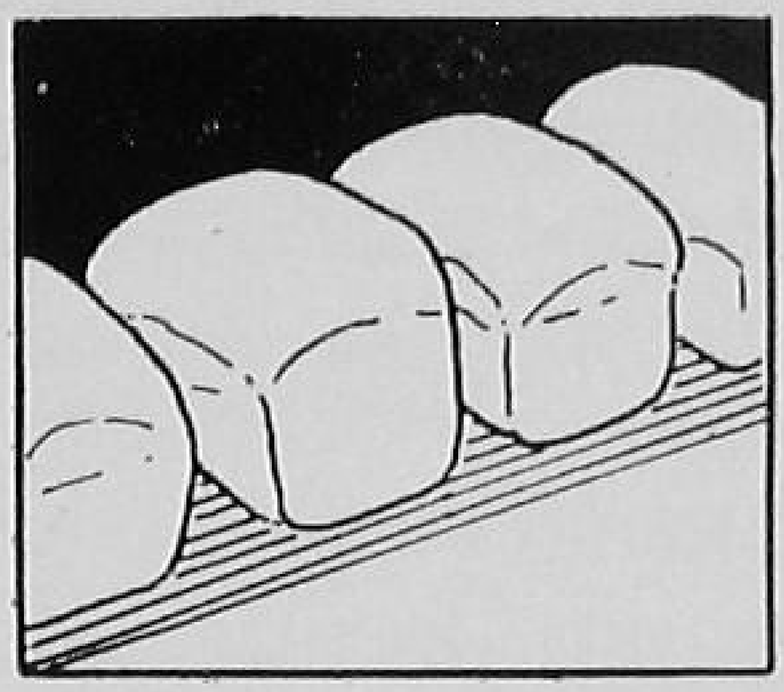
Letters announcing meetings should be more than mere announcements; they should make people want to come. Your letter, sent to a selected group of persons inviting them to attend a special meeting, is effective if practically all who receive it attend and the others take the trouble to telephone or later explain their nonattendance. If its purpose is to get a few selected farmers to become alfalfa or soil-erosion-control demonstrators or cooperators, the effective letter obtains the cooperation of nearly all who are solicited.

May 1, 1948

Do You Like Homemade Bread?

Hello there, Homemaker!

Have you ever made your own bread? Or have you just wished you could?



Well, here's your chance to learn how to make it with a crisp, light brown crust, and a mouth-watering flavor. Remember the odor of fresh loaves hot from the oven?

We're going to hold demonstrations of breadmaking in our county on two separate days in two different places. Maybe if you can't get to a meeting on the first day, you can come the next.

Here's the information -

Jane Woodworth will demonstrate on the following days:

Tues., May 11 - 2 p.m. - Canton - Universalist Church basement.
Wed., May 12 - 2 p.m. - Massena - Show room at 150 E. Orvis St.

Put these dates on your calendar now and be sure to come. You'll make your family happy. You'll have fun learning too! The new methods are easy.

So don't forget! We'll be looking forward to seeing you.

Cordially yours,

Beth Lewis
Assistant Home Demonstration Agent

Martha Storrs
Home Demonstration Agent

Figure 28. Sample circular letter. Note that only one topic is treated; the salutation is friendly; the opening paragraph is personal, and succeeding sentences and paragraphs are short; the information about time and place is complete, closing with an appeal for action.

You will need greater care in planning and preparing a circular letter than in preparing a letter to one person, because the circular letter must appeal to many. Its essentials are:

1. An appropriate caption or salutation.
2. An unusual or otherwise interesting approach.
3. A first paragraph that will gain attention.

4. Material that will—
   a. Emphasize one idea or objective.
   b. Hold interest in the main idea.
   c. Create realization of the importance of the problem.
   d. Make an effective use of appeals.
   e. Establish confidence in the facts presented.
   f. Arouse a desire for the remedy suggested.
   g. Lead to a decision to act.
5. A closing statement that will encourage prompt action.

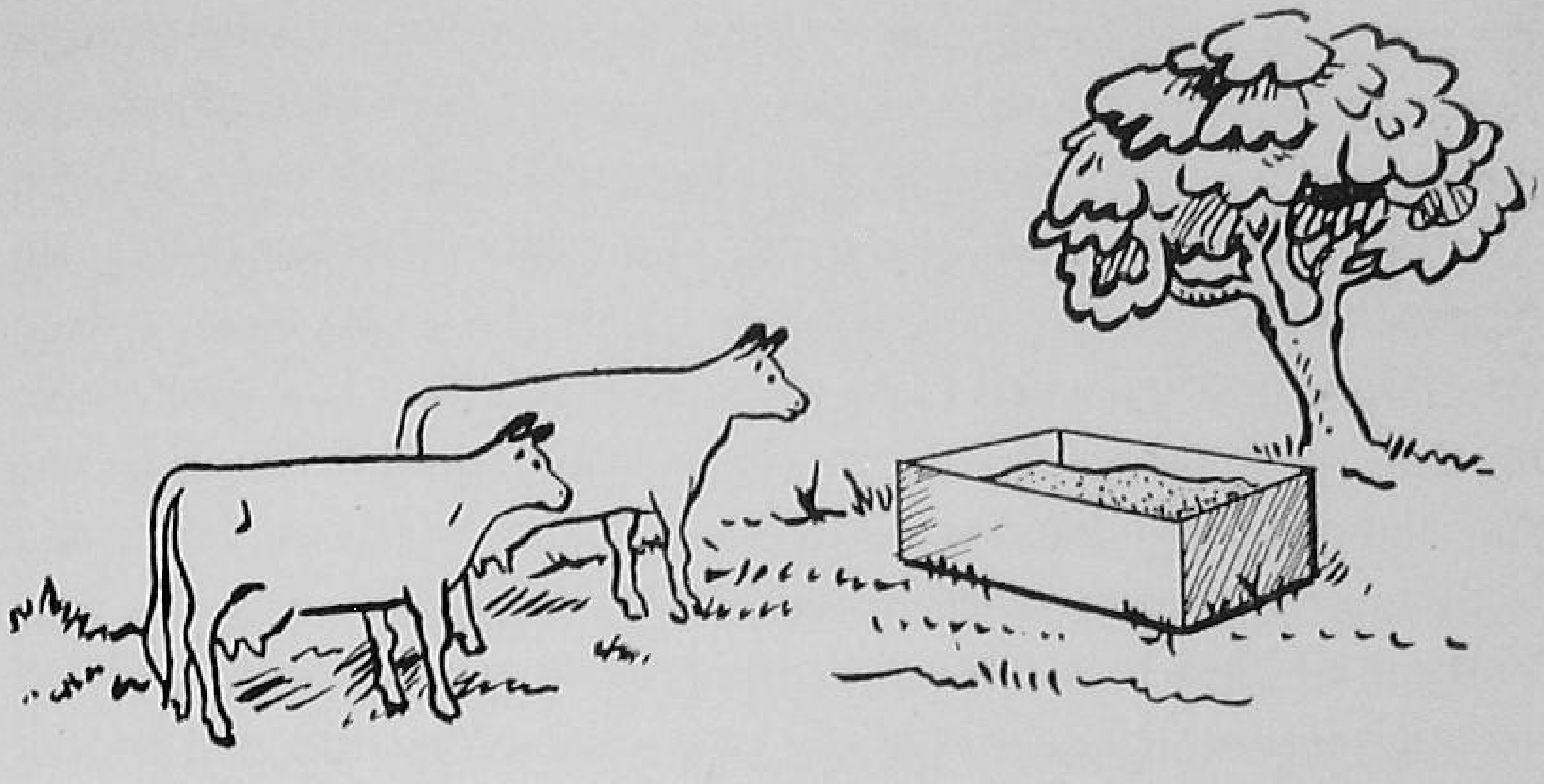
An interesting style of writing also is desirable. Letters with these characteristics are more easily read, understood, and likely to get results. If your letter needs to be long, good subheads or underscoring can be used to aid in holding the reader's interest.

First collect and prepare material that will further the purpose of the letter; arrange it in proper sequence for effectiveness. Although a well-planned letter can be ruined by poor duplicating, good duplicating cannot overcome the weakness of a poorly planned letter.

Illustrations Attract Attention

Cartoons, line drawings, or pictures draw attention to the points you wish to make. Because most circulars are prepared on duplicating machinery in county offices, the tracing or copying of drawings or cartoons is common practice. It is proper for a cartoon to be a queer representation of something. But never try to make a true drawing of anything if you know you have no artistic talent. For example, a cartoon cow with bulging eyes and a sagging back may look funny, but an unsuccessful attempt to reproduce the true image of a fine dairy animal will result in something grotesque to the eye of a dairyman. He might jump to the conclusion that you don't know what a good cow is instead of realizing that you are not an artist.

Various extension booklets are prepared from time to time offering reproductions of cartoons and suggested drawings. Farm magazines and newspapers contain material which will suggest ideas. Equipment companies will give you help in reproducing these ideas on stencil with a stylus or style pen. Such pens come in various shapes for different purposes. Among the most satisfactory ones to use are



Dear Dairyman:

Today as I was driving over to Kendall, I passed a pile of ground limestone on the edge of a plowed field. There must have been ten tons of the stuff. Minerals, I thought; lime for that field; ready to be applied.

Do you know that this same ground limestone is also good for dairy cows and heifers as well as for the soil? Well, it is. But livestock also need phosphorus and salt as well as this lime (calcium).

The best time to feed cows and heifers minerals is right now when they are on pasture, out in the sunshine. Sunshine, with the vitamin D it contains, enables them to use more of the minerals that they eat. They will store them up for their health needs.

Why don't you place a box of minerals in your pasture where the cows and heifers can help themselves? You can make the box, then keep it well supplied all summer long with this mineral supplement. Add some each week. There will be little waste.

The mixture might be 100 lbs. of steamed bonemeal (dicalcium phosphate); 50 lbs. ground limestone (high calcium grade is best) and 50 lbs. salt (iodized salt if you can get it). That is the mixture, a simple one that is not expensive. You can mix it yourself. Feed this mineral in addition to what your grain contains.

Try the mineral box idea this summer. Let me know how you like it — and how your cows and heifers like it.

Sincerely yours,

Norman C. Kidder

Norman C. Kidder
County Agric. Agent

Albany, New York
May 17, 1948
NCK/s

Figure 29. Sample circular letter. All paragraphs are short; the opening sentences are dramatic. Note the challenge in the second and fourth paragraphs and then the definite recommendations followed by "try it and let me know!"

the round-pointed for tracing outlines, the loop for drawing straight lines, and the blunt for shading-over screens. For shaded effects use fine sandpaper, fine screen wire, or fine milk-strainer wire; and for solid-black shading use a "silk sheet." Translucent screen plates can be purchased. Use sufficient pressure on the stylus to make a deep impression on the stencil for a clear, accurate line. It is preferable to make all drawings from copy. Neat lettering adds much to the appearance of any drawing. Letters for this purpose can be copied from magazines, posters, mimeograph-lettering guides, and the like. Vertical and horizontal lines or cross-section paper are helpful for making uniform curves and letters of the same size. Manufacturers of duplicating machines furnish reliable instructions for such work including the use of two or three colors by preparing different stencils and changing the ink. A mimeoscope—a working surface of glass, with a strong light underneath to bring out details for tracing—is very useful.

If illustrations are copied, the artist's name should appear on the cartoon. If they have been copyrighted, permission for use must be obtained from the copyright owner.

Service Letters

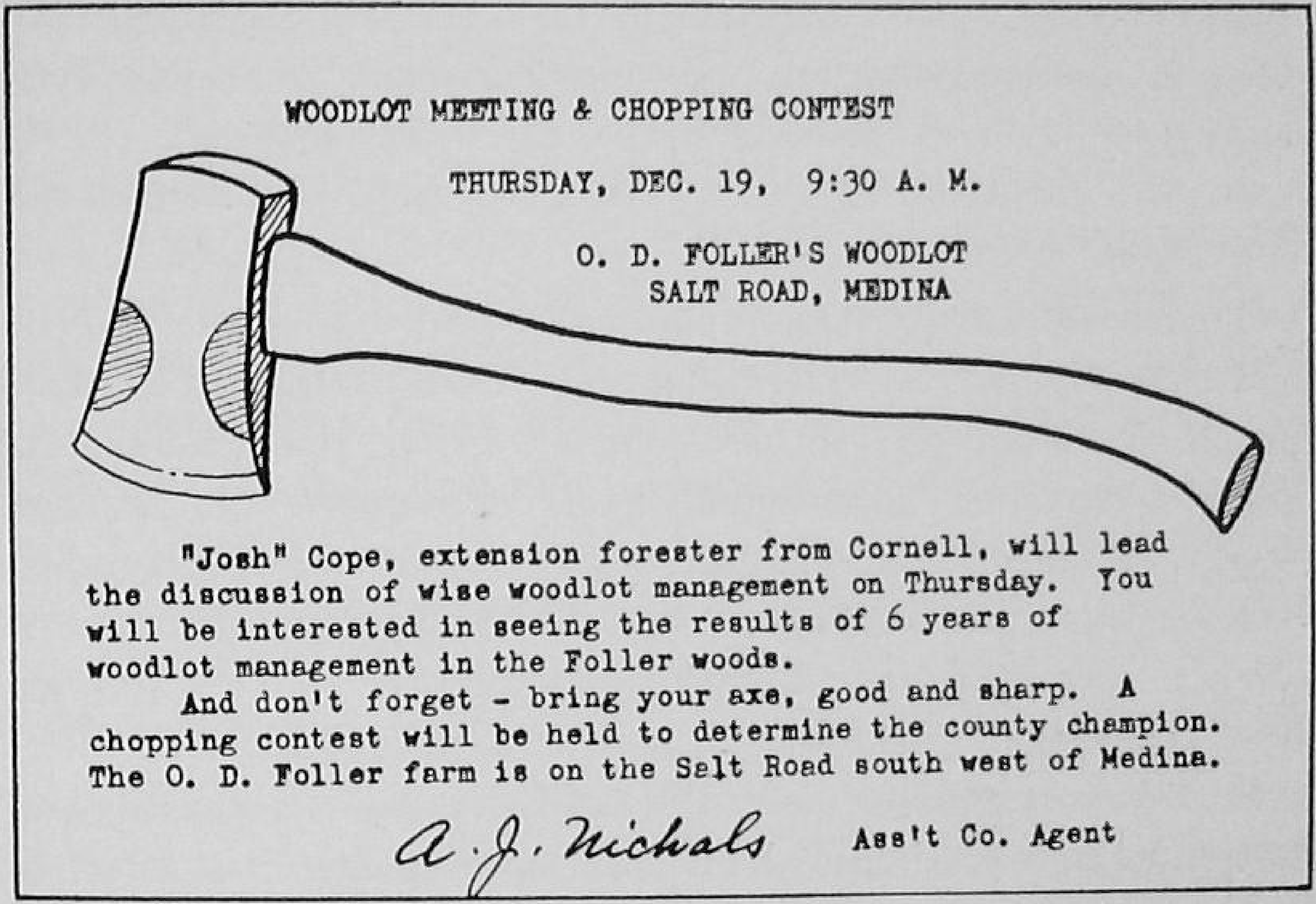
Printed circulars are coming to be more widely used as service letters. When the subject matter is suitable for use in several counties such circulars are prepared and printed at the state college. This permits the use of more photographs, and it saves money. When funds are available to use county pictures and to produce a letter especially designed to apply to one county it is good practice.

Letters prepared at the college generally leave a place for the county agents to sign, thus giving the personal touch. There may be a statement such as "this material prepared by Harry Vetch, Agronomy Specialist," or the specialist may withhold his name and be content to let credit fall where it may.

The advantages of printed circulars are neatness, general appearance, amount of material on one page, and appropriate use of photographs or color, or both. (For more details, see Chapter XXIII.)

The Salutation or Caption

Salutations should be appropriate and friendly. Use of formal salutations such as "Sir," "Dear Sir," or "Dear Madam" is undesirable in writing to farm people who are cooperating with the exten-



WOODLOT MEETING & CHOPPING CONTEST

THURSDAY, DEC. 19, 9:30 A. M.

O. D. FOLLER'S WOODLOT
SALT ROAD, MEDINA

"Josh" Cope, extension forester from Cornell, will lead the discussion of wise woodlot management on Thursday. You will be interested in seeing the results of 6 years of woodlot management in the Foller woods.

And don't forget - bring your axe, good and sharp. A chopping contest will be held to determine the county champion. The O. D. Foller farm is on the Salt Road south west of Medina.

A. J. Nichols Ass't Co. Agent

Figure 30. Sample postal or franked card. The axe leaves no doubt about the subject matter; the familiar opening and the brief wording are a good way to get attendance.

sion agent. If the number of letters to be sent is small, to type in the name of the addressee and to use some such salutation as "Dear Mrs. Brown" is usually worth while. In a letter relating to a dairy project, the salutation "To Progressive Dairymen," used with discretion, makes the recipients realize that the letter has gone out to persons on a selected list. Farmers take pride in being included in such a group. Among other forms used are "Dear Mr. Poultryman," "Dear Co-operator," "Dear Club Member," "To 4-H Club Members," and "To the Farmers of —— County."

Because finding a suitable salutation is difficult, especially when writing to several hundred farmers, the salutation is often omitted, and a caption or heading, similar to those used for news articles

and many business letters, is substituted. Use captions that suggest, promise, or challenge. When possible, words of one or two syllables should be used. A combination of illustration with appropriate caption is often used. Among captions sometimes used are: "When To Cut Alfalfa"; "How to Double Poultry Profits"; "See How Easy It Is"; "Health Habits for Children." A Wisconsin agent used the heading "Test and Weigh to Make Cows Pay." A South Carolina letter on rats began with the caption "You Can't Sell a Rat. Why Feed It?"

The "You" Approach

Your letter will have more personal appeal if you refer to "you and yours." A circular is just a personal letter which goes to many people. Each one gets his own copy. Of course, you must not say anything that won't apply equally to all or to anyone. The pronoun "you" may appear in the caption, or opening sentence, for example: "This is your outlook bulletin," "You may not believe it, but . . . ," "When your livestock committee met recently . . . ," "Do you need farm labor?" "You will be pleased to know that. . . ."

Studies in readability show that all the personal pronouns and references to home, family, and familiar things have the effect of holding interest.

An Effective Appeal

A circular letter going to a large mixed group should make use of the more general basic motives of life. But if your circular is going to a particular group, its appeal can be quite specific. Think about this group—the age, sex, work, interests, and activities. In so doing you may find the door which opens into their innermost desires in life.

To intensify the desire of the recipients to act on suggestions given for a situation, appeal to fundamental wants or motives such as desire for increased gain, health, safety, saving of time, durability, dependability, recognition, and the high regard of other people. People want to avoid unnecessary work, poverty, and losses from plant and animal diseases and insect pests. They want sympathy, aid, and encouragement; they are primarily interested in getting, not

in giving. The picturing of advantages such as gain or satisfaction is one of the most important elements in persuasion. Generally speaking, men are inclined to be most interested in increased financial returns, utility, and pride of ownership; women, in the health and welfare of children, appearance and serviceability of garments, and comfortable, attractive homes. Boys and girls want an enthusiastic, friendly letter written in their own language, emphasizing the fun, satisfaction, and pride of ownership or achievement they can have for the effort put forth to do something worth while. Since human interests and desires vary a great deal, use of a variety of human appeals is advisable.

The number of replies you receive is a measure of the success of your appeal. In a study of over 8,000 circular letters in Missouri,[2] C. C. Hearne found that the use of bright-colored paper, blue and red, greatly increased the number of replies received to circular letters. Neutral colors—buff, salmon, and light pink—had about the same result as white paper, or in some cases less.

Getting Action

Assuming you have obtained attention, interest, and desire you are now at the point of getting action. This is the time-honored salesman's formula—now to get the signature on the dotted line! By picking one person typical of the group to be reached you can build the cumulative effect to a persuasive ending.

Frequently it is desirable to close with a "clincher," or slogan summarizing the advantages of the practice recommended and suggesting what to do. Slogans help to get ideas remembered and acted on. They should be given a prominent place in the circular letter. Slogans frequently are stated as commands: "Make Your Kitchen Work Easier"; "Make a Dress That Fits and Suits"; "Use Milk for Health"; "Grow Soybean Hay the Recommended Way." Among others used are: "Better Bulls Build Bigger Bank Balances"; "Wage War on Insects and Diseases."

If detailed supplementary material is to be presented, extension

[2] "Influence of Color on the Effectiveness of Extension Circular Letters," Missouri Agricultural College Extension Studies Publication No. 2 (June, 1933).

agents may follow the example of business firms and enclose a brief circular, card, or leaflet, which will be read by those whose interest has been aroused.

A procedure such as mixing spray materials should be described specifically enough to be followed readily, but concisely enough to make the busy farmer take time to read it. If a drawing is used to show a piece of equipment or some special feature of a building, the important parts should be marked with arrows, with encircled numbers corresponding to legends, or by other special devices, as is done by many firms in advertising machinery and equipment. Most graphs and charts are too complex for use in circular letters.

Sideheadings or check marks also are effective. For special emphasis, important phrases may be set in capitals, written in longhand, typed in red ink, underscored, inserted in the form of marginal notes or boxed material, or added as postscripts. Such methods should be used sparingly.

Now make it easy to reply. Use a card or form to be checked "yes" or "O.K." Put the space for the recipient's name and address at the top where it won't be missed. If he fails to sign when he sends in a request, *you* will be blamed when he gets no reply.

If only a few replies are involved and receipt of them is important, enclose a stamped or penalty envelope, or use a double penalty mailing card or permit envelope. Business reply cards and envelopes bearing the printed name and address of the agent and the prescribed indicia, including the number of the special permit obtained from the local postmaster, may be distributed and returned through the mails under the provisions of Section 510, Postal Laws and Regulations, without prepayment of postage.

A New York dairy specialist furnished the county agents in the state a sufficient number of printed "enrollment" letters to send copies to approximately all dairymen owning five or more cows. Nearly 50 per cent of the dairymen who received the letters signed and returned the enrollment card requesting a series of seven service letters.

When the first draft of the letter is written, cut out unnecessary words, paragraphs, and phrases. Then have someone criticize it for

you. Finally, check it against the five C's of good letter writing—clearness, conciseness, coherence, completeness, and correctness.

Mailing

It seems trite to say that care should be taken to have all names and initials correct. When you get a letter addressed to you with your name misspelled or incorrect, you are certain that the letter is not from one of your close friends. You unconsciously dislike "the stranger" before you open his letter. Postmasters are permitted to correct mail lists free of charge. They are not permitted to compile or give out lists.[3] More detail about mailing lists is found in Chapter XXIX.

Summary

The following outline is from the "Circular Letter Teaching Kit" of the U.S. Department of Agriculture Extension Service:

CIRCULAR LETTERS THAT CLICK

1. Have the purpose of the letter very clear in your own mind—that is, the purpose over and above the simple objective of getting people to read the letter. Decide exactly what action you want the reader to take:

   a. Reading an enclosure.
   b. Attending a meeting.
   c. Adopting a new practice.
   d. Performing a service to community or country.
   e. Answering a questionnaire.
   f. Obtaining information from neighbors.
   g. Acting to prevent spread of insect pests or animal disease.

2. Appeal immediately to personal interest with a snappy statement in the first paragraph pointing out the importance of the problem to the person addressed.

3. Point up the punch in the lead paragraph with an illustration carrying out the idea.

4. State the facts concerning the nature or seriousness of the problem—tied down as closely as possible to the immediate locale or pocketbook of the person.

[3] *U.S. Postal Guide for 1939*, article 16, p. 120.

5. Suggest what the person can do to help alleviate or solve the problem.

6. Remember that the first objective is to get the letter read. So—be sure the letter is neat and appealing to the eye.

7. Caution: Protect your professional reputation and that of the Extension Service by checking the letter and the stencil carefully for grammatical errors, misspelled words, and factual errors.

8. Above all—write as you would talk to the persons you are addressing. Personalize your letter by using—

a. Expressions you use in everyday encounters with them.
b. Direct statements.
c. Simple sentences.
d. Action words with few affixes.
e. Personal references (the "you" approach).
f. Appropriate anecdotes.
g. Common experiences.

Circular Letter Check Sheet [4]

Item	Good	Fair	Poor	Numbered Comments
Letter looks attractive, interesting, and easy to read				
Gets attention through unusual or otherwise interesting approach:				
Caption or salutation appropriate and effective				
Cartoon or other appropriate illustration				
Opening sentence strong				
Letter seems important; tells people something they want to know (develops interest):				
Has "you and your problem" approach				
Arouses curiosity at outset				
Timely, deals with an immediate problem				
Emphasizes importance of problem through reference to eco-				

[4] U.S.D.A. Miscellaneous Publication No. 403 (1941).

Item	Good	Fair	Poor	Numbered Comments
nomic losses or other annoyance				
Letter well planned; interest of reader held throughout by good continuity:				
Adheres to definite purpose (one idea)				
Simple sentences and short paragraphs make reading easy . . .				
Complete and concise				
Clear and easy to understand and remember				
Technical words and phrases avoided				
If long, broken with interesting subheads				
News-story style followed				
Letter makes reader aware of problem and eager for practical remedy suggested:				
Necessary facts well presented so that reader may decide wisely				
"Reason why" used effectively .				
Suggestion used effectively				
Motivates reader to action through an effective use of one or more appeals:				
Emphasis on satisfaction to be gained by following recommended practice, or on present losses				
Dollars-and-cents appeal				
Comfort-and-convenience appeal				
Health-and-personal-safety appeal				
Save-labor-and-effort appeal . . .				
Pride appeal				
Builds confidence in arguments or suggestions presented by citing demonstration results or quoting local farm people or other authorities				

Item	Good	Fair	Poor	Numbered Comments
Effective ending used. Encourages immediate decision and action by emphasizing that—				
It pays in financial or other satisfactions				
Money and effort costs are low .				
It is convenient and easy to adopt				
Others are doing it and are pleased with results				
The reader should act now to get best results or to take advantage of special offer				
Only one course of action is suggested and the steps to be taken are clearly indicated . . .				
Letter suggests calling on county extension agent for additional information or material				

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CHAPTER XXII

Readability[1]

THE IMPORTANCE of writing well for the press, for radio, and in letters can hardly be overstated. At the risk of slight repetition, the matter is given more specific attention in this chapter. What makes some writing easy and some writing hard to read? What are the arts and skills that make writing easy to read?

Before getting into the details of readability, let's have a taste of it. No one can deny Ernie Pyle's rare gift to describe and picture for us the life of the American soldier in action, in solitude, or just as a plain, normal G.I. Joe. Note Pyle's simple, concrete, *picture* words (many are one-syllable), his *active* verbs, his friendly style, and his short sentences.

Sometimes a person says the silliest things without being able to account for them. For example, one night our command post made a night move of about five miles. I went in a jeep, perched high on top of a lot of bedrolls.

The night was pure-black and the road was vicious. We were in low gear all the time, and even that was too fast. Many times we completely lost the trail, and would wander off and bump into trees or fall into deep ditches.

It was one of those sudden nose dives that undid me. We were far off the trail, but didn't know it. Suddenly the front end of the jeep dropped about three feet and everything stopped right there. That is, everything but me.

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[1] This chapter was prepared from material furnished by Mrs. Amy Cowing, U.S.D.A., and by Nell B. Leonard, New York State College of Agriculture, Cornell University.

I went sailing right over the driver's shoulder, hit the steering wheel, and slid onto the hood. And as I flew past the driver I said, "Excuse me." [2]

Simplicity in Writing

About three-quarters of our farm adults have had no more than 8 years of schooling. So when you write on the high-school level or above you may be forgetting the majority of your clients. Over half of our extension writing is above the level that is easy reading for the average rural farm adult.

The day has passed when the "educated" person or writer is judged by the number of many-syllable and unfamiliar words used, by the long sentences, the stilted introduction, and the "assigned composition" style. The A B C's of journalism—accuracy, brevity, and clarity—are the fundamentals of all good writing.

Your purpose in writing is to instruct or to entertain. Therefore, your first consideration is your reader audience. If you were writing for a scientific paper, you would use a vocabulary different from the one you would use if you were writing for the general public. The "tone" or style, too, would be different.

In a study of the Farmers' Almanac published by the Extension Service in Louisiana, certain phrases were chosen from it to see whether farmers and homemakers understood them.[3] What does it mean to "reduce the grain ration"? Only three-quarters of the people understood. What are "crops for succulent grazing"? About one-third understood this phrase. The phrase "supplementary permanent pasture" was understood by about two-thirds of the readers. The very ones who understood the least needed the information the most. The study showed that readability involved three questions about printed matter: (1) Is it read? (2) Is it understood? (3) Is it effective in bringing about desired changes? These questions are also concerned with the printer and his art, which are discussed in Chapter XXIII.

You will write for the general public, or you may be called upon

[2] Ernie Pyle, *Brave Men* (copyright, 1944, by Henry Holt and Co., Inc., New York).

[3] *Evaluation of the Louisiana Farmers' Almanac*, U.S.D.A. Extension Service Circular No. 434 (March, 1946).

to interpret the results of research in terms familiar to the farmer, the homemaker, or the rural youth. Success in writing depends on how well you know your subject and how carefully you think it through and how skillfully you plan it. Planning on paper pays. How clearly you communicate information to average readers depends on how well you *select, sift*, and *sort* your facts.[4]

First, SELECT facts—

1. *Suitable subject matter:* Does it meet a need? Is it timely? Is it of current interest? Does it apply to your area? Is information practical? Can people use the information?

2. *Readers:* Who are the people you want to reach? What are their problems, interests, and educational levels? Do readers have the environment and capacity to make use of the information?

3. *Purpose of publication:* What do you want it to teach? What do you want it to accomplish? Do you want to stimulate interest in a program, or do you want to influence people to do something?

Second, SIFT facts—

Sift essential facts necessary to give information clearly. Screen out difficult concepts that are beyond reader's experience or understanding; such concepts as vitamin concentrates, carotene-content, international units, nutritive value of 100 grams of foods. Give layman an appreciation of subject rather than a detailed explanation. Express high lights. Don't try to impress the lay reader with all you know. Don't document everything.

Third, SORT facts—

Arrange facts in logical order. Give information so reader can follow it step-by step. Help reader dig for facts; set out important points in 1-2-3 order. Guide reader with attractive subheads.

Three requirements for easy reading are:

1. *Short sentences*, clear in meaning and simple in construction, with few prepositional phrases and dependent clauses. (Make them

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[4] Amy Cowing, *Let's Write Easy Reading*, Mimeographed Leaflet, Division of Field Studies and Training, U.S.D.A. Extension Service (1947).

average twelve to seventeen words.) Give one idea in each sentence.

2. *Simple words*—familiar, concrete words. (Study synonyms.)

3. *Personal, or human-interest words* such as "mother," "father," "boy," "girl"; personal pronouns, such as "our" and "your"; and names of persons. (Use from six to ten personal references per one hundred words of text.) [5]

Measuring Readability

For those who wish to go further in the study of easy reading it would be well to refer to books which are the outgrowth of much research and have available various formulas for measuring readability.[6] These formulas do not measure all factors that make for hard or easy reading. The Flesch Formula, for example, *estimates* readability by counting only: (1) Average sentence length, (2) Average number of syllables, (3) Personal words (words referring to people), (4) Personal sentences (sentences directed to the reader). According to the new Flesch Formula[7] the shorter your sentences, the shorter your words, and the more you refer to people, or *talk to people,* in your writing, the easier your writing is to read. This formula is based on the same principles as the old Flesch Formula.

Examples[8] of comparative readability follow:

HARD READING	EASY READING
Neither growth nor health can be sustained unless the daily foods provide certain essentials which are called vitamins. Research has shown that the	You need vitamins. Everyone does—young and old. You need vitamins to build a healthy body and to keep fit and strong. When You eat fresh vege-

[5] A report of *The Publications Workshop,* conducted in cooperation with the federal extension service under the personal direction of Dr. Irving D. Lorge, Division of Psychology, Institute of Education Research, Teachers College, Columbia University, published as Extension Service Circular No. 432, September, 1945.

[6] *Marks of Readable Style: A Study in Adult Education.* Contributions to Education No. 897 (New York: Columbia University, Teachers College, 1943). Out of print.

[7] Rudolf Flesch, *The Art of Plain Talk* (New York: Harper & Bros., 1946).

[8] Amy Cowing, *Let's Write Easy Reading,* Mimeographed Leaflet, Division of Field Studies and Training, U.S.D.A. Extension Service (1947).

HARD READING	EASY READING
vitamins have great importance in many of the vital activities of the body. Health, growth, development, and fortification of the body against disease, all of which are directly affected by the vitamin content of the foods eaten, can be influenced by a careful selection of foods. There are various kinds of vitamins, each kind having its own characteristics and functions. Vitamin concentrates are of great value where restricted diets or one-sided diets imposed by low incomes, ignorance, or indulgence have resulted in serious shortages or in acute symptoms of deficiency diseases, such as pellagra, scurvy, beriberi, and rickets. (*College level.*)	tables from YOUR garden YOU get vitamins in their natural form. Seeds are rich in certain vitamins. Green growing plants produce and hold them. Ripe fruits, vegetables, and grains give YOU vitamins, along with other nourishment. YOU can't taste vitamins in food or smell them. For the most part YOU can't even see them in the food YOU eat. To get all the vitamins YOU need for all-round health, try to have in YOUR meals every day the following basic seven foods. (*Sixth-grade level.*)
The above is hard to read because: *Long sentences:* Average 24 words. Too many ideas and "which" clauses in sentences. Density of ideas. Long, hard abstract words with too many syllables (169 per 100 words). Too many verbal nouns. Technical words not defined or translated into simpler terms.	The above is easy to read because: *Short sentences:* Average 11 words. One idea expressed clearly in each sentence. No "which" clauses. Short, easy concrete words with few syllables (135 per 100 words) and few prefixes and suffixes. Live verbs instead of verbal nouns. Technical words such as "vitamin" translated into concrete foods (where you find vitamins). Human-interest words: 11 personal words (capitalized) per 100 words. Personal sentences: 70 per cent. Writer "talks" to YOU in active voice, as in speaking.
No personal words or personal sentences. No direct appeal to reader—everything is impersonal. Passive voice harbors Readability Enemy No. 1—the verb "be" that disguises and tags onto other verbs.	

The Lorge Formula [9] estimates readability by counting (1) Average sentence length, (2) Number of hard words, (3) Number of prepositional phrases, (4) Number of personal references.

In addition to short sentences, Lorge looks for fewer prepositional

[9] Irving D. Lorge, "Predicting Readability," Teachers College Record 45 (March, 1944).

phrases, more common words, and more personal references to make easier reading.

The Division of Field Studies and Training of the Extension Service, U.S. Department of Agriculture, is constantly at work on readability and can give you the best current help on it.

The few examples of effective writing that follow are in no way definitive—they are offered merely as food for thought.

Sentences

Too many short sentences make choppy reading. Therefore, use some longer sentences with the shorter ones, and change your sentence structure. Be sure the construction is correct and the meaning clear. Long, involved sentences are hard to read and are not clear.

Example: Also, it is very hard, indeed, to find a diet which a cow would eat which is deficient in vitamin E.

Better: It is hard to find a diet deficient in vitamin E that a cow would eat.

Example: You have heard of the "Black Hole of Calcutta," that dungeon of horror and death, where men died like flies from DDT, 123 of them in one night. Bad ventilation and no fresh air did it—suffocated them.

Better: You have heard of the "Black Hole of Calcutta," that dungeon of horror and death, where men died from suffocation as flies die from the effects of DDT; 123 men died in one night.

Lazy or Empty Words

Three words—*factor*, *case* or *in the case of*, and *occur* or *occurrence*—can well be termed empty words. Sometimes we are too hurried or too lazy to search for a word that conveys the true meaning.

Factor is used for *condition, item, cause, circumstance, result, fact*, and the like.

Example: For the home builder, the most important *factor* to consider probably is ease of construction.

Better: For the home builder, probably ease of construction is the most important *consideration*.

Example: One of the important limiting factors of the turkey industry in this state at the present time is the lack of an adequate supply of vigorous poults that are pullorum- and paratyphoid-clean.

Better: One of the important *limitations* of the turkey industry now is the lack of enough vigorous poults that are pullorum- and paratyphoid-clean.

In case of is used for *with, for, in, if,* and similar words.

Example: In case you go, be sure to call Mr. Jones.

Better: If you go, be sure to call Mr. Jones.

Example: The problem is not important *in the case of* milk.

Better: The problem is not important *for* milk.

Occur is used for *grow,* and similar words.

Example: Wild plants *occur* on the steep slopes.

Better: Wild plants *grow* on the steep slopes.

Example: The opening of Congress *occurs* in January.

Better: The opening of Congress *is* in January; *or* Congress opens in January. [The opening does not "occur"—it is set by law.]

Unnecessary Words

Many sentences can be shortened and the meaning made clear by omitting words or phrases.

Examples:

The house is *located* on James Street. The house is on James Street.

The barn burned *down* [*or up*]. The barn burned.

The records are *almost* accurate. The records are accurate. [There is no *degree* of accuracy.]

There are many types of cameras *which* are on the market today. Many types of cameras are on the market today.

The island is *known to be* inhabited by a savage tribe. The island is inhabited by a savage tribe.

If a spot *where a fire is started* is well supplied with dry fuel and wind adds new fresh air abundantly, a fire may be almost explosive in nature. On a spot well supplied with dry fuel and on which wind adds plenty of fresh air, a fire may be almost explosive in nature.

A fire *started in such a place* may *truly* become wildfire in a *matter of* seconds. Such a fire may become wildfire in a few seconds.

Indefinite Words

Some words are indefinite, particularly those that express degree and amount.

Quite means absolutely or wholly. Do not use it for *almost, nearly, very, rather*, or *somewhat*.

Correct: The law is *quite* right.
Wrong: The leaf is still *quite* green.
Better: The leaf is still somewhat green.

Rather and *considerable* tell you little.
Example: The loss is rather small. The money is considerable.

Very weakens the construction, too.
Example: It is *very* straight.
Better: It is straight. [There is no degree of straightness.]

Some Distinctions

Find the differences in meaning among the following words and the proper places to use them. You will need a dictionary or a grammar.

further	farther	if	whether
people	persons	in	into
fewer	less	due to	owing to
per cent	percentage	likely	liable
avoid	prevent	so—as	as—as
each other	one another	effect	affect
principle	principal	compared to	compared with

Short Easy Words

Use short, or familiar, words in place of long words or of those with more syllables. Use the simplest word that carries your meaning.

at the present time	now *or* at present
in the event that	if
on account of	because
all of a sudden	suddenly

subsequent to	after
prior to	before
on the average	most
sufficient	enough
approximate	about
eliminate	reduce, discard, remove, get rid of
consume	eat or drink
as to whether	whether
terminate	end
for the purpose of buying	to buy
will use his best efforts	try
put in an appearance	appeared
held a meeting	met
for the purpose of	to
extend an invitation	invite
neither now nor in the future	never
there are hopes for	it is hoped
is a very serious trouble	is serious
is a question asked by many	many ask

"Former" and "Latter"

When you use *former* or *latter*, you ask your reader to look back a line or more to find the word or phrase to which these terms refer—a "mental block" in reading. Why not repeat the word or phrase?

These suggestions show how important it is to consult a good grammar. Study the position of words. Look up the common errors in Woolley's or some of the other references given below. If you are writing for print, your editors might find you guilty of dangling modifiers and indefinite antecedents—such errors are bad but can be corrected. Use slang sparingly, if it will help the reader, but choose it carefully for expressiveness and precision.

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Everyone should have on his desk a dictionary, a grammar, and an atlas. The other books in the list below are helpful too.

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CHAPTER XXIII

Publications[1]

SOONER OR LATER most extension workers find themselves writing something for a publication other than a newspaper. We have discussed the principles of easy-to-read writing; besides studying them, you need to plan carefully a printed program, report, or promotional pamphlet.

The first principle in planning your publication is simplicity. Simplicity does not mean drabness—rather it means good taste and good teaching.

Plan the publication to be as brief as possible, considering the message it must carry. Use subheadings to break the material into convenient and natural parts.

Try to visualize the use which will be made of the publication. Should it be pocket size or bulletin size? How will it be distributed? Can it be mailed in a regular-sized envelope? If it is an envelope stuffer or reminder, it is not expected to last long. If it is a pamphlet which you hope will be kept for reference, maybe it should have a cover of heavy material. This will add expense.

Trying to visualize the finished copy will help you also to plan the illustrations. Follow what is said in Chapters XXIV and XXV in choosing your illustrations. Then when you have the best plan you can devise and have all your materials together, it is time to get the help of your printer, editor, or layout man.

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[1] Most of the material in this chapter is taken from *Let's Prepare a Publication*, by Nell B. Leonard (Cornell Extension Bulletin 753, 1948).

Working with Your Printer

If you are an extension worker who writes for publication at a college, you have the editor or publisher to advise you and to deal with the printer. If you are a county worker, however, you generally deal directly with a printer; therefore, the more you understand the elements of good design, layout, and illustrations, the better results you will have when your publication comes off the press.

Regardless of how well the manuscript is written, or how appropriate the type in size and style, or how good and how well chosen are the illustrations, a bulletin will not be read unless all of these elements are put together to form a uniform, attractive whole. That is the job of the layout man. Just as the artist uses color, form, composition, and the like to create a picture, the layout man uses his knowledge of type, of form, of tone, of balance to produce a pleasing page.

You may be neither an artist nor a layout specialist, yet you can help plan an attractive publication by keeping it simple, using good illustrations, and following the basic principles of design.

Use of Illustrations

The purpose of illustrations is to help the text tell the story more effectively or, with the help of well-written legends (the brief descriptions under the illustrations) to tell the story itself. Whether you should use photographs, drawings, or cartoons depends upon your subject and also upon your method of presentation. Choose the one that will best tell the story and be in keeping with the subject. How to make a snow suit for Johnnie or how to install a water system could probably be told best by drawings, while such subjects as conservation of wildlife, pasture management, and refinishing furniture could best be told by photographs. Sometimes both photographs and drawings are needed in the same bulletin.

To use cartoons in a dignified publication, or to use them with photographs beautiful in composition and design, would be just as inappropriate as to wear a bright, gaudy-figured necktie with a tuxedo, or to wear a dinner dress to a morning wedding.

The illustrations as reproduced for printing by an engraver are called halftones and line cuts (zinc etchings) because the halftone (usually made from a photograph) is dependent upon tonal values (from light gray to black) in its reproduction and the line cut (made from a drawing) upon black lines or black masses.

The engraver speaks of a 110-, 120-, 133-, or 150-screen halftone. That means that a screen with 110, 120, 133, or 150 lines to the inch was placed in front of the lens to make the halftone negative. The proper screen to use depends on the quality of paper upon which the halftone will be printed. Coated stock usually takes a 120-, 133-, or finer screen, and English finish stock usually a 110- or 120-screen. Consult your printer and your engraver about this.

A glossy print is best for reproduction copy. It should have sharp detail, definite contrast between the lights and darks, and depth, because the engraver can do little to make the halftone better than the photograph. Study photographs to see how they differ in tonal value and in detail.

Some photographs can be retouched (usually by airbrush) not only to improve the tones but to take out objects or lines that detract from the composition of the picture, such as electric wires along the roadside or in the dooryard. Don't attempt to retouch the photograph yourself. Usually the engraver or an artist can do it for you.

Engravers prefer to have the photograph twice as large as the finished halftone.

Never write on the back of a photograph unless it is with little pressure and a very soft pencil, for any marks that show on the copy will appear in the halftone. Metal clips also make marks, so never clip photographs to a piece of paper or to each other.

The copy for a line cut should be sharp and "crisp" and definitely black and white. Be sure all lines and lettering are carefully and neatly made. Untidy, carelessly drawn copy detracts from the appearance of your bulletin. Make the drawing at least twice, but not five times, as large as the finished line cut. If you have several line cuts, be sure there is some unity in their presentation. For example,

in a series of charts have the lettering uniform in size and style (capitals and lower case or all lower case).

Relation of Photographs and Drawings to Layout

Photographs have tonal values from very light gray (almost white) to dark gray and to black. This you must consider in relation to balancing the page. Line drawings and cartoons also have dark and light areas.

Illustrations are placed not only to achieve balance but to guide the reader's attention into the page. For example, a photograph with persons or animals is placed so they face in, unless there is enough direction expressed by other lines to guide attention into the page.

In bulletin layout, usually the greatest weight is at the outer margin rather than at the binding. If you have only one illustration, and it is not full-page width, probably it is best at the outside.

Keep the arrangement orderly. Don't put odd-shaped pictures together with white space between that looks like ribbons of spaghetti. Circles, triangles, ovals, irregular lines, and the like direct the reader's attention to the design itself rather than to the real message or center of interest.

Place illustrations near the text references and in as natural surroundings as you can. A field of clover looks more realistic at or near the bottom of a page than higher, and flying birds look better nearer the top.

Anything not straight type is considered an illustration so far as layout is concerned; that would include charts, maps, statistical material (tables), boxed (within rules) material, and the like.

Orderliness contributes to unity, and *consistencies help to make orderliness.* For example, if you have tables (statistical material), have all of them in the same size of type. If you use rules in one table, use them in all. All headings of the same value throughout your bulletin should be in the same size and kind of type.

Making a Dummy

A dummy is the arrangement of each page as you want it to appear in the final printed publication. There are two ways to make

a dummy. One is before the type is set and the other is after the type is set. Doing it beforehand is the best way. With no layout made before type is set, you may have too much or not enough material. Some type may need to be reset to go around the illustrations, or you may have to omit some illustrations. In other words, you may pay for unnecessary corrections or for type or illustrations not used.

If a dummy is made before type is set, the printer or editor can determine from your typed copy (manuscript) and your illustrations the most economical over-all size for your publication, the proper margins (size of type area), and the number of printed pages. He plans each page, that is, where each illustration is to appear, where the headings or subheads will come, and the amount of text needed to fill the space. He marks each illustration for enlargement or reduction accordingly. You may need to submit more text or illustrations to fill the allotted space or you may need to omit some. Furthermore, you will read proof only once because the printer can follow the dummy for paging.

Proofs and Proofreading

The copy set in print comes to you in long sheets called *galley proofs,* because the lines of type are assembled in order in a long tray called a galley. If you made a carefully prepared dummy for the printer to follow, he may send only *page proof* for you to read. He takes the type from the galley, puts it in the page forms, puts the engravings in place, and then takes proofs. Usually these proofs are not on the quality of paper the printer will use for your publication, so don't be disappointed in the appearance of the page or of the illustrations.

Proofreading is different from ordinary reading because you have to read the proof once for content and again for errors.

Indicate all corrections in the margin, never between lines as in editing. Watch for inconsistencies in spelling, in the use of numerals, in type, and in capitalization. Be sure all text footnotes and table notes are numbered correctly; that the legends are for the right illustrations; that the illustrations are right side up. Common proofreader's symbols may be found in *Webster's New International Dic-*

tionary under the heading of "Arbitrary Signs and Symbols" in the Appendix. They are also in printer's handbooks and can often be obtained on a card from your print shop.

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CHAPTER XXIV

Photography[1]

PERHAPS the easiest visual aid for a county extension agent to produce is the color slide. It requires a certain amount of moderately expensive equipment and a little knowledge, but for results obtained it is undoubtedly the most profitable.

Photographs have been important in extension work since the beginning, but never have they been as popular as since the advent of simple color photography. Black-and-white photography involves negatives and prints, and, although the final result may be used in many ways, it is not as simple to use as is the color slide.

Color slides are made in cameras taking 35-mm. motion picture film. The film is supplied in light-tight cartridges containing enough film for twenty exposures. When all the frames have been exposed the film is rewound into the cartridge and sent to the finishing laboratory where it is processed and mounted in cardboard mounts measuring 2 by 2 inches. These slides fit any "2 by 2" projector without adapters. That is all there is to it. One make of film is sold at a price that includes the finishing. Another make, which can be finished by the user, is cheaper, the maker charging extra for rolls which are returned to be processed.

There is another kind of color film which can be used in almost any camera, but slides cannot be made from this film, and it is finished only as paper prints. The colors are not true enough for most extension work. Since prints can now be made in almost any size from 2 by 2 slides, this form of color photography is the most adaptable.

[1] This chapter was written by Don Bennett, Stamford, Connecticut, while serving as instructor at the Extension Service Summer School at Cornell University in 1948.

What Camera to Use

"What camera should I buy?" is the question asked most by extension people. There is no simple answer. It depends entirely on what you are going to do. If color slides of normal objects and actions are what you want, then almost any good 35-mm. camera will do the job. It is useless to list such cameras here since modifications and improvements are made often and a camera recommended at this writing might be obsolete within a year. It is best to study the desirable features. The camera should have a coupled range finder to simplify the focusing problem. It should focus to within 3 feet of the subject. It should have a clear view finder. It should be capable of being used with flash for indoor work. It should have a tripod socket. The speed of the lens is immaterial unless you want to take fast action pictures. The speed of the lens governs the price to a degree—the faster the lens, the higher the price.

With your camera you should buy a tripod, a sunshade, and appropriate filters for either black-and-white or color. You'll need these for any camera.

If you are a specialist in entomology, soils, pathology, or similar subjects which often require working extremely close to the subject, you want a camera with ground-glass focusing. This might be a single-lens reflex, or it might be a 35-mm. camera with close-up focusing attachment and extension tubes.

If you are going to do editorial work and want many news pictures, you want a press-type camera, either the twin-lens reflex or the film-pack camera—the type frequently called "press camera."

Be assured of this, there is no such thing as an all-purpose camera. No camera yet designed can do every photographic job because the demands on photography are so diversified that a camera to do them all would require wheels and an engine to haul it about!

Photography Depends on Light

Two characteristics of the light are important—intensity and quality. There must be enough light adequately to expose the film, and the light must be of such quality that the subject is rendered

in proper balance of light and shade. Direct sunlight is not necessary, in fact it is really good only for distant shots. The best light is when there are a few clouds in the sky, high white ones, or when the sky is thinly veiled so that shadows are soft and luminous.

The intensity of light can be measured with an exposure meter or judged by reference to an exposure guide. Either will give satisfactory results in determining the correct exposure for daylight shooting.

The quality is another matter. Only the eye can determine that. When the day is cloudy there are no shadows, and a black-and-white photograph made under such conditions will be lifeless and flat, running to gray. When the light is brighter, shadows will be seen, and the photograph will have the desired range from white to black, with plenty of gray tones in between.

In color photography we need not depend on the rendering of the tonal scale in shades of gray to achieve the desired contrast, since the diversity of color in the subject will give us the contrasts we need. We need less visual contrast also, because the color film will not record as wide a range of tones as will black and white. For this reason most beginners are advised to have the sun directly behind them when photographing in color; to make sure there are no dark shadows and to assure a flat frontal light. This is good advice for the first roll, to check your exposure, but after that forget it. The classical lighting, with the sun over either shoulder, is good for color, and you can even use side or back lighting after a little experience. You need more exposure for side and back lighting because the side of the subject nearest you is receiving less light.

There are several ways of measuring exposure for color, but the following two methods are easy to use and require no complicated apparatus or methods. The first is the "lightest-darkest" method. With an electric exposure meter measure the brightest color in your scene and determine the exposure. Then measure the darkest color and determine the exposure. Give an exposure halfway between, and the two extreme colors will be well reproduced. In this method, neither black nor white are considered as colors.

Even less exacting to use is the "incident light" method. Incident

light is the light falling on the subject. The method just described measures the reflected light. To measure the incident light, it is best to use a meter designed for the purpose, and there are several of these. The meter is pointed at the light source and the reading taken. The proper pointer is then set at the reading, and the exposure is read from the dial. If an ordinary meter is used for the incident light method, give one-tenth the indicated exposure. This is because the average reflectance of objects is 10 per cent.

What Is Exposure?

Perhaps you haven't discovered yet what exposure is and how to use it. On the simplest cameras the exposure is set for you. It is the product of four factors:

1. *Light intensity*, which can be measured with the meter.

2. *Film speed* or sensitivity, which is built into the film and is indicated as ASA, Weston, or GE numbers. (There are other systems based on European standards which we shall ignore.)

3. *Shutter speed*, which is expressed in fractions of seconds, seconds, or minutes.

4. *Aperture setting*, also known as stop, diaphragm, or lens speed. Your lens is calibrated according to the *f* system which is expressed as the ratio of aperture diameter to focal length.

The shutter speed and aperture are set on simple, fixed-focus cameras. The shutter speed in this case is usually 1/25th second, the aperture varying between f:11 and f:16. The better grades of cameras have adjustable shutters and adjustable diaphragms, and, generally speaking, the more expensive the camera, the greater the range of shutter speeds and lens settings.

Confusing to most beginners is the relationship between shutter and lens. The lens can be likened to a pipe having two valves, one controlling the rate of flow and the other the time of flow. The shutter controls the time. The diaphragm in the lens may be adjusted to control the flow. As the diaphragm is operated the diameter of the hole in it is altered and at the same time its area is altered. It is really the area that concerns us, but we calibrate the diameter. If you remember your elementary arithmetic, you'll recall that the areas of

two circles vary as the squares of their diameters. Since the aperture calibration is a ratio, the ratio of diameter to focal length, it is obvious that there is a constant and a variable in each calibration. American lenses are usually calibrated on a scale like this:

f: number	2	2.8	4	5.6	8	11	16	22
square of f:	4	7.84	16	31.36	64	121	256	484
or about	4	8	16	32	64	128	256	512

Actually, our *f* numbers are roughed out, eliminating decimal places where possible, shortening them to one place where impossible.

It is easy to see that this progression is such that each aperture is about twice as large as the one preceding it, although the application is the reverse of what you read because the numbers represent fractions. (On some German lenses you will find the calibration mark is $\frac{1}{4.5}$ or $\frac{1}{2.8}$.) Thus f:8 is $\frac{1}{8}$ and f:11 is $\frac{1}{11}$. Therefore, the light is admitted in inverse proportion to the squares, f:8 admitting twice as much light (flow) as f:11.

In other words, for the same light strength, if we choose to open the lens from f:11 to f:8, we halve the shutter time to compensate.

Now right away you think, "More confusion!" But really, it isn't so. Theoretically, as you look at the range of apertures and times on your exposure meter dial, you can use any adjacent combination and get the same picture. Then, you ask, why choose? The answer is quite simple. You choose the longest exposure time that will record your subject without blur. Moving objects in front of the camera change position even in so short a time as one one-hundredth of a second.

If that movement is enough to result in a blurred image on the film, we don't want it. We must stop the motion, even if it takes one one-thousandth of a second to do it. There are cameras in everyday use that take pictures in one ten-thousandth of a second, and some laboratory cameras that take pictures in one one-millionth.

Why then don't we just set all shutters at one one-thousandth and use a fast lens? Because the best pictures are those made with the longest exposures. So the camera makers give us a chance to pick

the best combination to meet the needs of the moment—the shutter speed that will stop the motion, yet let the light soak into the film for the longest possible time. Incidentally, unless you are very steady, it is not wise to hold the camera in your hand for speeds longer than one-fiftieth of a second. If you are very steady you can hold it at one twenty-fifth or even at one-tenth. To test yourself, make identical exposures with the camera held in the hand and on a tripod.

Why all the space devoted to exposure? Because it is the least understood by all beginners and causes most of their failures. If you solve the exposure problem, the rest of picture taking comes easy.

What to Take

The rest of picture-taking is knowing what to take, how to pick the best viewpoint, and how to eliminate the less desirable material. Put another way, it's placing the major emphasis on the important subject matter and preventing subjects of less importance from distracting attention by reason of false emphasis. Some people call this composition. Let's forget that word now, and use the yardstick of emphasis.

Most extension pictures are technical or semitechnical. However, unless the principles of emphasis are applied to making them, it is possible that the audience will not see the points intended. *The principal subject matter should be the most emphatic thing in the picture.* Obvious, isn't it? Yet how many pictures are made in which an obtrusive background, extraneous foreground material, or a wrong viewpoint completely spoil that approach?

Once a specialist made a color slide of an improved type of poultry range feeder. The feeder was made of new, bright yellow wood and was posed in the bright sunlight of a range. The range shelters in the background did not detract; they belonged in the picture and were far enough away that they were smaller than the feeder. At the left of the picture a deep shadow lay on the ground. This did not detract, but protruding from the shadow was a plank. Square, regular, severe, and sticking out of a round black shadow, it immediately drew the eye away from the feeder. When the plank was pointed out to the

specialist who made the slide, he said, "I never saw it before, but now I can't see anything else in the picture."

It has been claimed that the designers of women's hats get their ideas by hanging around drugstores and looking at the Sunday snap-

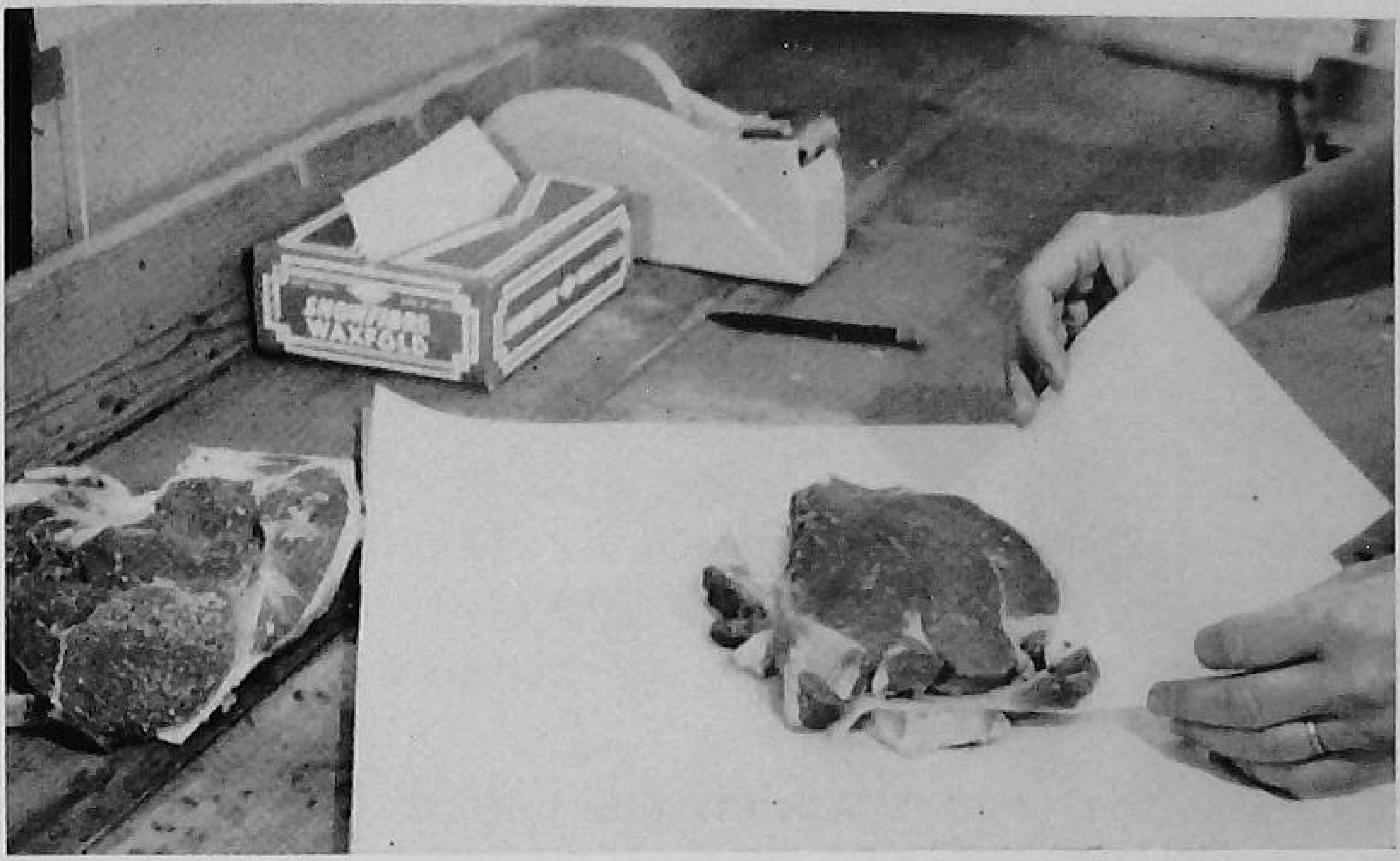

Figure 31. This picture places emphasis on the operation—preparing meat for freezing.

shots. The tall hats are suggested by telephone poles and trees that grow from people's heads. The bushy ones derive from distant trees that snuggle about the ears of the portrait subject. Some of the crazier ones come from taking pictures against a background of traffic.

Since the camera has monocular vision, and we human beings enjoy binocular vision, it is easy to see how such mistakes can be made. Our two eyes see two sides of a subject and place objects at their proper relative distances. The camera does not have this advantage and sees everything as in the same plane. It behooves us, therefore, to examine background and foreground to make sure they are free of extraneous material which might introduce a false emphasis in the picture.

There are several ways to correct such a condition when you discover it. Move the camera sideways, up, or down. Move the subject

to a new location. Remove the offending material, or hide it in some way.

The matter of viewpoint is important. It seems that every county agent tries to include his whole county in every picture. State workers want all counties in every shot, and for federal workers a picture should accurately depict conditions in all forty-eight states. It is next to impossible to tell a whole story in one picture—it might take two or fifty! You cannot describe a process in a single sentence—why try to do it in one photo?

Taking a Series of Pictures

There are good reasons for using a series of pictures rather than a single scene. The mind exhausts a picture in 20 to 30 seconds; therefore we should have a fresh visual stimulus two or three times a minute. Although a single complicated scene may have five elements, that does not constitute five stimuli; rather, it increases the confusion five times.

The motion picture approach is ideal for series work, especially in color slides. Use the long shot, with its multiplicity of interests, to show the interrelation of elements of the subject. Then introduce each element separately in a close-up. Use medium shots to show the relationships of two of the elements.

What is a long shot, a medium shot, a close-up? How long is a piece of string? The measure of these pictorial elements is not linear—it is mental. A close-up of a field mouse could be made from a distance of 12 inches, of an elephant from 30 feet. The long shot shows all or most of the elements involved in our story. The medium shot is made from a distance and viewpoint that picks out a few of them in sequence so we can see how they logically co-act. The close-ups, one after the other, help us to tell our story, riveting the attention of the audience on the details we want to get across.

Break down your subject into these elements, use five pictures where one might do, liberally salt your series with close-ups of every detail from differing angles or viewpoints, and you will have a high level of audience interest, a high rate of learning, and a ready audience every time you appear.

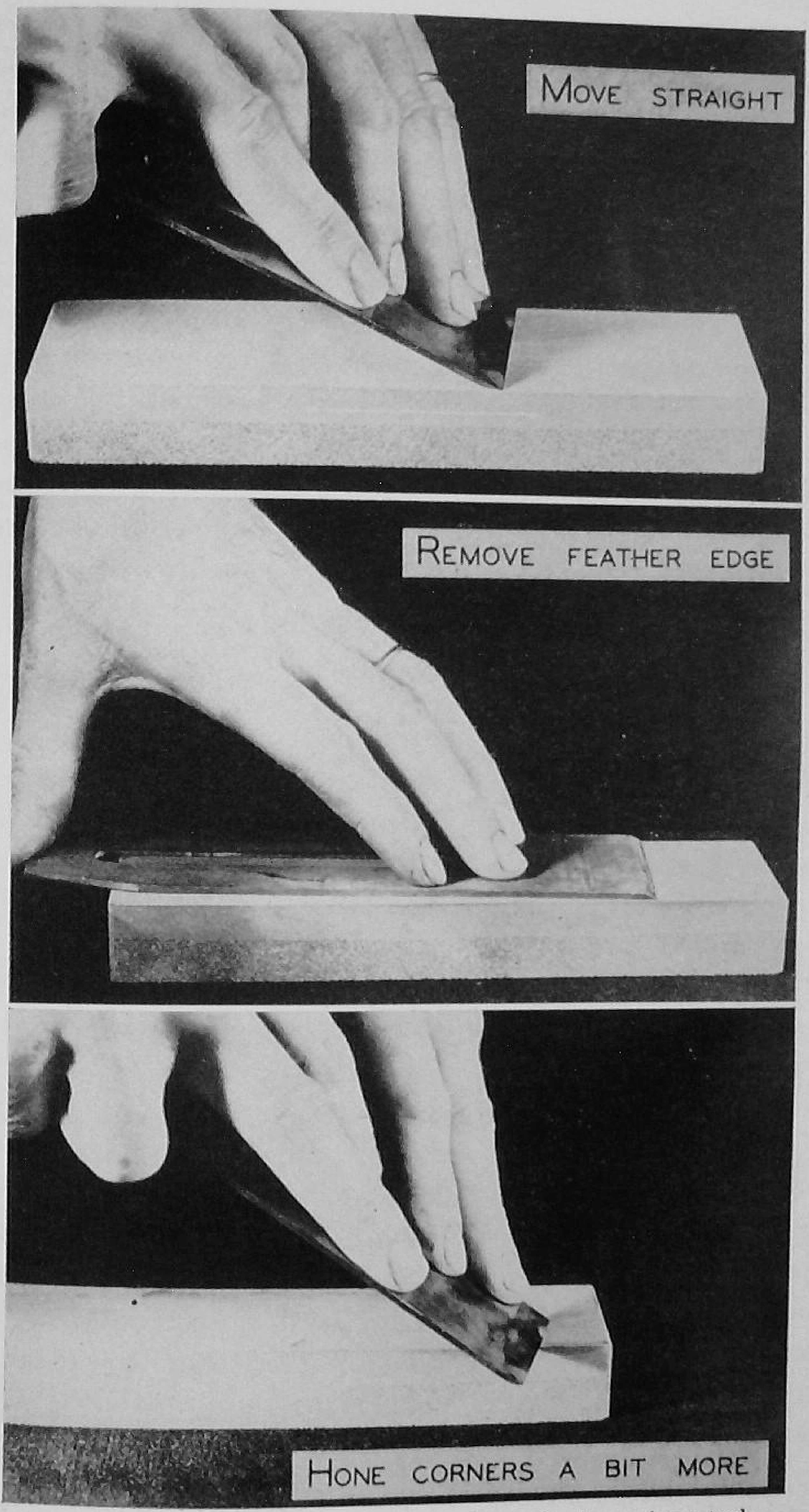

Figure 32. A series of close-ups shows each step in sharpening a tool.

Where to get scenarios for subject-matter slide series? Try the federal slide films. Substitute local scenes for the pictures in these strips. Borrow some of the titles if you want. Many of the federal films are made in both single- and double-frame sizes. Single-frame is the same as the silent 35-mm. motion picture; it measures about ¾ by 1 inch, and each foot of film contains sixteen pictures. Double-frame is the same size as the conventional 35-mm. still camera and measures 1 by 1½ inches. The single-frame films are projected in a single-frame projector. They cannot be shown in a motion picture projector because the average slide film would last only two or three seconds! The double-frame slide film can be shown in a tripurpose projector which has a removable mask permitting this interchange. The double-frame film can also be cut apart and mounted in 2 by 2 slides. However, black-and-white slide films should not be mixed with color slides. It is hard on the audience.

What Is Composition?

The federal films are also good guides to composition. Each frame should be studied for that and compared to similar scenes from your own files. In this way you can learn and can probably improve your own work. Incidentally, you will probably find it easier to compose scenes in a pleasing manner if you have had art training—it does help.

Perhaps you have gathered by now that composition has two phases: the arrangement of the individual scene and the arrangement of scenes as a continuity. In visual work continuity is especially important since we wish to convey a meaning without leaving too much to the imagination or deductive powers of the audience.

Note that we have not discussed form or mass, entering points, eye travel, center of interest, steelyard balance, or any of the hundreds of yardsticks professional art teachers use to explain emphasis. It would require several books to explain all the compositional theories of the various schools of thought in formal art, but if the beginner will consider the rule of emphasis he can get along rather nicely without formal training.

More important, from the visual aids viewpoint, are these five points of artistic photography:

1. Proper exposure, to avoid distraction from impure colors and too light or too dark objects.

2. Proper focus, with the principal subject sharpest of all the objects within the scene. We can sometimes help emphasis by having the principal object sharp, those closer and farther just a little bit fuzzy.

3. Steady pictures, particularly in movies, free of directional blurs, made from a tripod if possible.

4. Principal subject most emphatic object in the scene, without distracting secondary objects.

5. Proper contrast for subject matter, with a natural range of tones between white and black, or with a *white* or a *black* at the end of a scale of tones. Avoid flatness, the gray-day appearance.

Now Let's Get Technical!

Fully 90 per cent of the people using a camera don't know what that piece of glass on the front end can do. Optical laws are very difficult and confusing to learn, if you learn them in the conventional manner. If you learn them the simple way they can be fascinating.

Did you ever have a "burning glass"? Hold it in the sun and focus the sun to a pinpoint on a leaf or piece of paper until it bursts into flame. When you do that you demonstrate a fundamental law of optics: a lens converges parallel rays from a source at infinite distance until they meet at a point. The sun is considered as infinity or at infinite distance. The distance from the lens to the meeting point is the focal length of the lens. The average magnifier has a focal length of 4, 5, or 6 inches. The complicated lens array in a camera has a combined focal length which is usually marked on the lens mount. It may be in inches, centimeters, or millimeters. There are 2.5 centimeters or 25 millimeters (mm.) in an inch. A rule of thumb says that the focal length of a lens should at least equal the diagonal dimension of the film it is to cover. Film of 35-mm. size provides a picture of 24 by 36-mm. size. The diagonal of this is approximately 44 mm.,

and the normal lens for 35-mm. cameras is 50-mm. focal length. You can be sure that the camera manufacturer chooses a focal length that is suitable.

The focal length controls the size of the image on the film. The longer the focal length, the larger the image. This leads to a popular bit of confusion. There is a special lens formula which produces a lens forming a large image. These lenses are called *telephoto* (sometimes miscalled telescopic!). But many persons erroneously call any lens of longer focal length than normal a telephoto lens. If you understand the true designations, however, you can accept such descriptions with full understanding of the intent.

Since interchangeable lenses are usually limited to 35-mm. miniature cameras and press-type cameras, let us stick to the one most common among extension workers—the 35-mm. We have already stated that the 50-mm. lens is normal. The image produced on a film area of 24 by 36 mm., or about 1 by 1½ inches, is then the normal image size for that lens. If we change to a 90-mm. lens we will get an image ⅘ larger. If we use a 150-mm. lens we will get an image 3 times larger.

There is a simple and useful formula or ratio that proves this condition. It is:

$$F'':I''::D':O'.$$

FIDO is a good dog. He barks the right answer every time. Notice that the inch sign has been given to focal length (F) and image size (I) and the foot sign to distance (D) and object size (O). The answer will always be in the sign of the unknown. Substituting inches for the metric measures of our lenses, 50 mm. equals 2 inches and 150 mm. equals 6 inches, let's work them out:

$$\begin{aligned} &2'':1\tfrac{1}{2}''::10':O' \\ &2\text{x}O = 15 \\ &O = 7.5 \text{ feet} \end{aligned}$$

or the field covered by the long dimension of a 35-mm. film at a distance of 10 feet is 7.5 feet. Now the other:

$$\begin{aligned} &6'':1\tfrac{1}{2}''::10':O' \\ &6\text{x}O = 15 \\ &O = 2.5 \text{ feet} \end{aligned}$$

or the area covered is one-third of what it is with the shorter lens; thus any objects will be three times larger on the film.

You can use this formula to solve any problem involving focal length, distance, object size, and image size. You will find it most useful and accurate when D exceeds 10F. At closer distances errors creep in and affect the result.

Let us apply the formula to light traveling in the other direction, as in projection. The formula stays the same. The usual projector lens has a focal length of 5 inches. Suppose we want to know the maximum screen size we can fill in a room where the projector is placed 20 feet from the screen.

Our "I" in FIDO will still be 1½ inches and our formula looks like this:

$$5'':1\tfrac{1}{2}''::20':O'$$
$$5\text{x}O = 30$$
$$O = 6'.$$

Therefore we need a screen 6 feet wide for that distance. For slide use it should be 6 feet square to take care of both horizontal and vertical slides.

Suppose that in designing a new auditorium for a county building we are asked what projection conditions we want. We must consider screen size, focal length of lens, and the other factors. Let us assume that the projection equipment will be elevated on a balcony or high stand so it will clear the heads of even standees in the audience. The length of the hall will be 65 feet. However, we must deduct the distance from the back wall to the lens and if we allow 5 feet for this we will have a "throw," or projection distance, of 60 feet.

Two of the elements of the FIDO formula are fixed in this condition: the D which is 60 feet and I which is still 1½ inches. Let us see what will result if we use our regular 5-inch lens.

$$5'':1\tfrac{1}{2}''::60':O'$$
$$5\text{x}O = 90$$
$$O = 18.$$

A screen 18 feet wide would be too large for such a short room. In fact, a 9-foot screen would be ample. Let us then find the size of lens that would fill a 9-foot screen.

$$F'':1\tfrac{1}{2}''::60':9'$$
$$9F = 90$$
$$F = 10.$$

A 10-inch lens would be needed and, since this is a stock size, it would not be difficult to meet the requirements. If the answer had been a focal length with odd fractions, it would be necessary to take the nearest even inch or half-inch in focal length and recalculate the screen size. Projection lenses are made in one-half inch steps.

What about movies in our theoretical auditorium? The movie frame is 0.400″ wide. We can substitute this in FIDO and see what happens.

$$F'':.4''::60':9'$$
$$9F = 24$$
$$F = 2\tfrac{2}{3}.$$

Since the closest lens to this is 2½ inches, let us work out the screen size for 2½ inches.

$$2.5'':.4''::60':O'$$
$$2.5 \text{x} O = 24$$
$$O = 9.6'.$$

Thus the picture would be slightly wider than our screen, overlapping about 4 inches on each side. Let's see what a 3-inch lens would do.

$$3'':.4''::60':O'$$
$$3 \text{x} O = 24$$
$$O = 8.$$

Thus we have a choice between a picture slightly larger than our screen, which is not bad, especially if the screen has a black border, or a picture smaller than our screen.

If any two or three of the elements of FIDO are known, and one can be assumed or estimated, the fourth can always be found. You will find many applications for this simple bit of arithmetic.

Close-up Focusing

Many times you will find need for working close to a subject. A limitation is imposed by most cameras on the closest distance at which the camera can be focused. With some cameras this nearest

distance is 6 feet, with others it is as close as 2 feet. There are cameras fitted with bellows which can work as close as two focal lengths. Few extensioners have them available. Most of us have cameras in which the lenses cannot be changed or extended, and the only solution to this is to use supplementary lenses. These are

Figure 33. A close-up focusing frame makes quick and accurate shots easy.

simple lenses which are fitted in front of the regular lens and as close as possible. A scale furnished with the supplementary lens tells just how close you can work. This distance must be measured exactly from the film plane to the subject. An error of one inch in this measurement is too much! (Fixed-focus cameras are usually set at 15 feet, and that distance should be used in referring to the table.)

For example: Using a plus 3 supplementary lens on a 35-mm. camera, we find from the table that when the lens is set on infinity the distance from the front of the supplementary lens to the subject is 13⅛ inches. If the lens setting is changed to 3½ feet, the lens-subject distance then becomes 10 inches. At the same time the field covered by the lens at 13 inches, approximately 6 by 9 inches, changes to about 4 by 7 inches at the closer distance.

A simple and clever device, originally created for close-up photography of flowers, simplifies the measurement and orientation prob-

lens. Two forms of this device are shown in Figures 33 and 34. This focal frame shows the field covered by the camera lens plus the supplementary lens and also the exact distance at which it is focused. Although limiting activity to a single condition, the device is so simple that several can be made to meet almost any condition.

Figure 34. A homemade focusing frame used with a tripod and a cardboard background.

Supplementary lenses can be used with camera lenses of any focal length. They are made in various diameters to accommodate the wide range of camera lenses. The lens-subject distance is the same regardless of the focal length, the only difference being in the size of the field covered. Tables giving these data may be found in lens data books available at most photographic dealers.

But what about the old use of these lenses as "portrait attachments"? Don't do it! Adding a supplementary lens converts your lens to a shorter focal length, and the longer lens-film distance permits closer working. But when you approach a person too closely, to make a portrait, you succeed only in producing a larger nose and smaller ears! The subject won't like it. Better keep at a distance and make enlargements.

Table 2. Subject Distances with Portra Lenses. Distance from Supplementary Lens to Subject for All Cameras *

Focusing Scale Set at Feet	Kodak Portrait Attachment	1 + Kodak Portra Lens	2 + Kodak Portra Lens	3 + Kodak Portra Lens
Inf.	52½	39⅜	19¾	13⅛
100	50⅜	33⅛	19⅜	13
50	48⅜	37	19⅛	12⅞
25	44¾	34¾	18½	12½
15	40⅝	32⅜	17¾	12¼
10	36½	29⅝	16⅞	11⅞
8	34	28	16⅜	11½
6	30⅜	25½	15½	11⅛
5	28	23¾	14⅞	10¾
4	25⅛	21⅝	14	10⅜
3½	23⅜	20⅜	13⅜	10
3	21⅜	18¾	12¾	9⅝

* Reprinted, with permission, from the *Kodak Reference Handbook.*

Relation of Light to Color

We take light as a common unvarying unit. It isn't. In black-and-white photography we need only enough to make an exposure. It should be bright enough to provide contrast to help our tonal values, but the color of the light is not so important. Light isn't white. We learn that when we tackle color photography. Light in the shade is blue. Light from the sun is white—at noon, in summer, from a cloudless sky. Light from the sun has little blue content at sunrise and sunset; light from a north sky is almost entirely blue. Shadows on snow are blue.

You see, color photography is something like aviation. The aeronautical engineer can prove that a bee can't fly, for its wing loading is too great. Color photography isn't possible, either, by the same statistical standards. This varying color of light will account for some of your disappointments in color shooting, but if you keep a diary of your shots in the early stages, you will quickly learn.

Color film (1948) is made in three classes: daylight, photoflood, and tungsten. Each of these is made to match a certain color temperature. Color temperature is measured in degrees Kelvin (K). Daylight film is balanced to 5600K, photoflood film to 3450K, and tungsten film to 3200K.

The right kind of color film for the light to be used is mandatory. If daylight film is used indoors where the light has a reduced blue content, the lack of blue will give the film a yellowish cast. If indoor film is used outdoors the final slide will be extremely blue. It is possible to compensate for this light deficiency by the use of filters over lens or light.

To use daylight film indoors use a blue filter or blue bulbs of "daylight" quality.

To use indoor film outdoors, use a pinkish filter to reduce the extra blue sensitivity of the indoor film.

To be more specific, use the filter made or recommended by the makers of the film. The filters and films of various manufacturers cannot be interchanged.

A word of caution: you cannot use filters intended for black-and-white photography with color film. Color film filters are delicate in tone and alter the color only slightly, but "color filters" for monochrome photography are strong and will tinge the whole slide with color. Strangely, the pinkish filter which corrects indoor photoflood film for daylight use is an ideal all-around filter for black-and-white photography, especially for darkening skies slightly and bringing out clouds.

Now let's consider the mixed light for color photography. In many scenes we will be shooting indoors with flash. At night we need no special precautions other than using indoor film. But in the daytime we must either block out the daylight or use daylight film and blue bulbs. Otherwise, everything touched by the daylight (not necessarily sunlight) will be tinged with blue. Fortunately, a dipping lacquer is available which permits us to dip our own bulbs as we need them and provides just the right shade of filter blue.

If you want to use flash outdoors you must also use a blue bulb, to match the daylight falling on the subject. However, if you want

to make an interesting experiment, use an uncolored flash bulb and the near side of the subject will be flooded with warmish yellow light.

Exposure for color is critical. There is a latitude of only one-half stop in color exposure. If you err, let it be on the side of slight underexposure rather than overexposure. Follow the instructions packed with the film. Use an approved exposure calculator or a good electric exposure meter.

Exposure for Color Film

In any case, calibrate your exposure aid. You cannot be sure of the absolute stop number of your lens, the exact speed of your shutter or the accuracy of your exposure meter. On your first roll, take one picture with the indicated exposure, one a half-stop larger, and one a half-stop smaller. Or change the film speed setting of the meter one unit. Record the three trial shots. Make three more of a different type of subject. Study the finished slides to determine the best one and use those data when shooting. For example, color film has a Weston rating of 12. You may find that with your lens-shutter-meter combination you will get the best pictures using a Weston rating of 10. This does not mean that your camera or shutter or meter are defective; it does mean that you will get better pictures.

Remember also that if you use side lighting or back lighting for your color pictures, you must increase the exposure. This is one of the reasons that incident light-exposure determination is slightly better for the novice. The method cancels one more thing you have to think about and indicates not only the strength of the light but the right exposure for the type.

Flash Photography

Flash bulbs and synchronizers make it possible for us to make pictures under almost any conditions. Each flash bulb supplies enough light for one picture. They should be used in a camera designed for flash work, or in an attached flash synchronizer. Many inexpensive cameras now have flash synchronization built into the shutter and require only the addition of a reflector and small batteries to provide adequate lighting anywhere.

The flash is ordinarily used at the camera. This results in good lighting for color work, but in black and white it is often too flat. This can be compensated by moving the bulb (on a suitable extension cord) to one side of the camera. One or two feet separating lens and bulb will restore modeling and lighting contrast. The bulb should be held higher than the lens. For deep rooms, it is possible to use more than one bulb, connected with suitable extension cords and fired in reflectors designed for flash use.

Exposure in flash work is determined by the distance between lamp and subject. Lamp manufacturers supply exposure data for common films and their lamps. Sometimes these data are in the form of "flash numbers." For a certain film and bulb the number may be 180. If the bulb is 20 feet from the camera, set the stop at f:8; for 10 feet set the stop at f:18. The flash number is simply the product of the distance and aperture.

Why is the flash exposure dependent on lamp-to-subject distance when ordinary shooting isn't? There is an old law of physics that covers this situation:—the inverse square law which states that the intensity of light from the same source falling on two objects at different distances from the source is inversely proportional to the squares of the distances. Thus if one object is 2 feet distant (square:4) and another is 4 feet distant (square:16) the relative intensity of the light on the two objects is as 1 to 4, with the closer object receiving light of 4 times the intensity of the farther object. It is for this reason that the light falls off rapidly in a flash picture, or in fact, any picture made by artificial light. Since outdoor pictures are lighted by a source 93,000,000 miles distant, a variation of even a mile between objects is relatively unimportant.

We can bend this law to our advantage. In extension work we frequently have to take pictures of meetings. Suppose we were to take a shot with the bulb on the camera, and the nearest person were five feet distant, the farthest 30 feet. The ratio would be 36 to 1, far too much for film to accept. But if we move the bulb to one side of the room, the camera to another, so the light falls equidistantly from the opposite corners, our picture will be evenly illuminated. The same conditions are true if photoflood or other fixed

lamps are used. The only difference here is one of intensity. While flashbulbs rival the sun in power, photofloods are comparatively weak and require seconds of exposure, whereas the flash can be taken in one four-hundredth of a second.

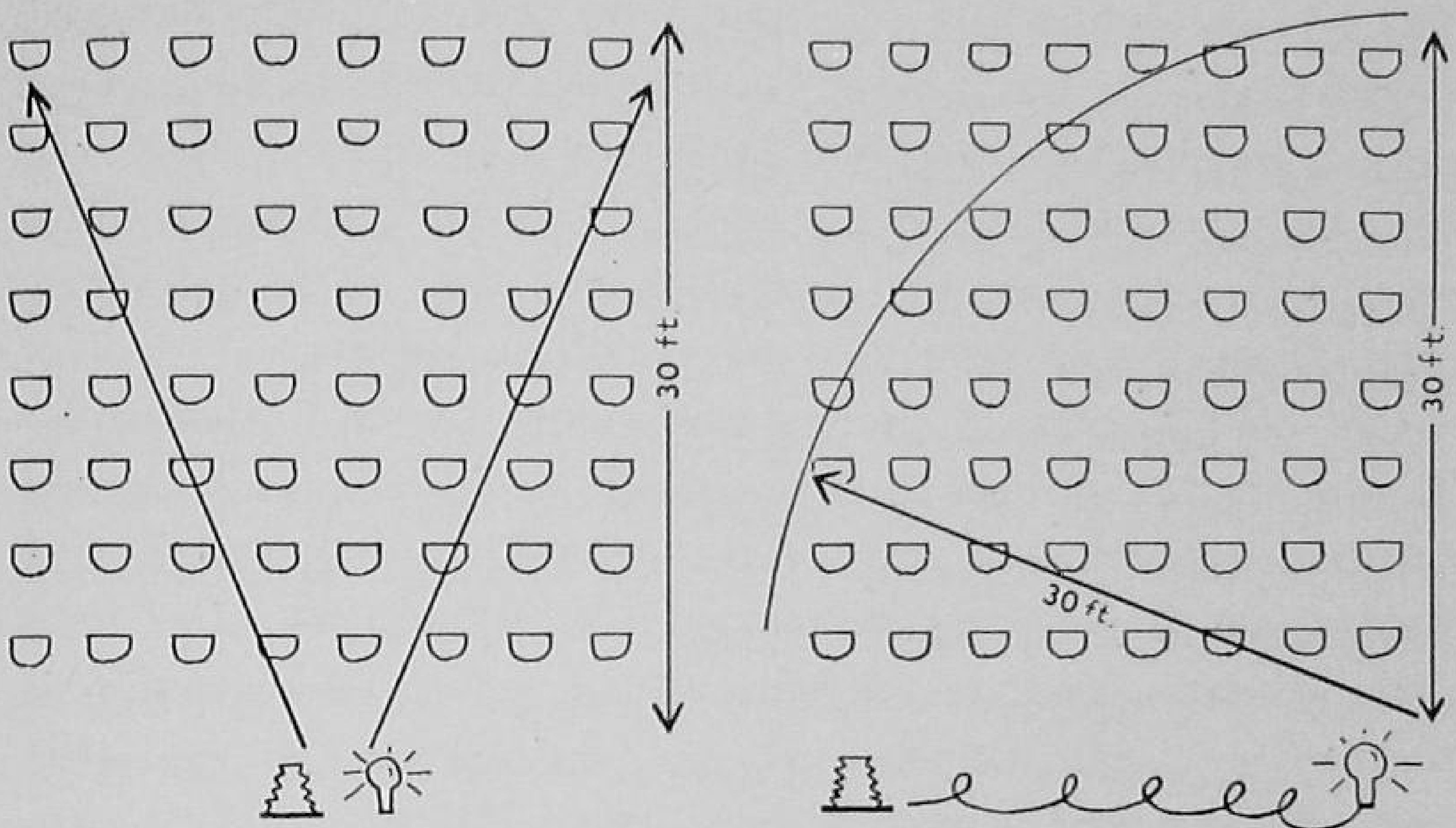

Figure 35. *Left.* The light intensity from the bulb is low at the right and left corners and high directly in front of the camera bulb. *Right.* More nearly equal light distribution is obtained by use of a wire extension to the flash.

A new type of flash made its appearance before the war and grew in importance during the conflict. It is the repeating flash, more correctly called a "flash *tube*." It has light of extremely short duration, averaging one five-thousandth of a second for the portable models, one ten-thousandth for the studio type, and one five-hundred-thousandth for laboratory models. A tube lasts about 10 seconds, but since this represents from 25,000 to 50,000 flashes, few people will wear them out. The drawback of these flash tube outfits is cost. A good one costs nearly $200, more than the average extension worker has invested in all his visual-aids equipment.

Application of Photography.

We have not discussed applications of photography in this chapter to any great extent. The uses are obvious or will be covered in Chapter XXV. Naturally, color slides are the easiest to make and

use, and they have maximum effectiveness in a county worker's visual program. Additional uses of photography include making news pictures for the local and regional press, bulletin-board pictures, posters, albums, annual reports, etc. These applications involve black-and-white prints, or, in a few cases, the more expensive color prints. Workers who do not have black-and-white pictures often have copy negatives and black-and-white prints made for reports. Do not expect a good black-and-white picture from a good color slide. The color lighting is flat, whereas the best lighting for black-and-white is anything but flat. Therefore the results will often be disappointing aesthetically, though perhaps good enough for reports.

One photographic application not widely known is the photo-drawing method of making enlargements or posters. This method makes an accomplished artist of anyone! Required equipment is a slide projector or enlarger and a *negative* of the subject. Work in a darkened room, but have a light handy for occasional inspection of the work in progress. Don't use a color slide, or a positive print; that involves tracing and requires definite artistic skill to achieve a satisfactory result.

Project the negative to the desired size on a piece of white poster paper. Use pencil, charcoal sticks, or pastel crayons. The lightest area projected from the negative represents shadows. Go over that light area smoothly and reduce it to the same tone as a slightly darker area. Then go over this darker area and darken it, darkening the first area simultaneously. Fill in light lines. Continue this step-by-step darkening with the goal of making the projected image an even, dark gray. Turn the work light on occasionally, and you will be astonished at the quality of the developing picture. First, it will be sketchy in effect, then the middle tones will appear, and if you continue working on it you will wind up with a positive image having pencil or crayon texture but all the tonal gradation and detail of a photographic print. Naturally, a negative slightly on the thin side is best for this photo-art trick.

There has been no recommendation in this chapter concerning darkroom work, developing, or even enlarging. This is a fascinating side of photography, but the typical extension worker has so little

free time that a suggestion to delve into this phase of photographic endeavor would be out of place. If you enjoy it, by all means carry it

Figure 36. This photo-drawing was made in twenty minutes by an extension worker who had never used the process before.

as far as you can, but when photography was limited to black-and-white and economy prescribed doing one's own finishing, few agents did it. With the advent of color and the simplicity of color use,

photographic methods of extension teaching made great forward strides—we rest on those achievements!

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[2] Each magazine in the photographic field stresses one aspect or caters to one interest. Examine the magazines at any photographic shop and select those that meet your experience level and interest. Photography is still developing so rapidly that only periodicals can keep up with the changes. The list of magazines above was complete at time of writing. In addition, various farm papers feature frequent articles on photographic aspects of agriculture.

CHAPTER XXV

Visual Aids[1]

VISUAL AIDS are anything that, when seen, aid the learning process. Extension history is rich in visual teaching methods. The first extension work, demonstration, was strictly visual. Farmers could see, in demonstration plots, the results achieved by improved practices.

One of the best visual aids produced recently is the North Carolina gardening bulletin, published early in World War II. It consists of pages of pictures with brief captions. Frank Jeter, North Carolina extension editor, said, "We planned this bulletin for people who can't or won't read." In that statement is the whole philosophy of the visual approach.

Most of us in extension learned our techniques by hard study of the printed page plus a little experience. We have become conditioned to the idea that all knowledge flows from ink. We forget that our clients, the farmers, seldom have the same idea. To many of them reading is difficult.

We too often try to carry the campus method to the farm, not realizing that the farmer hasn't much time to stop and read, if he can read. Every study made of what people *want* to read finds pictures topping the list. Most success magazines use pictures liberally. But the academic approach reverses this trend and continues to force *words* on an unappreciative world!

But, you say, "I know nothing about taking pictures." Even if

[1] This chapter was written by Don Bennett, Stamford, Connecticut, while serving as instructor at the Extension Service Summer School at Cornell University in 1948.

you use only the visual aids available to you, without learning to make your own, you will find your programs made more popular, your efficiency increased, and your work lighter, or conversely, you will have more time for the things you want to do.

What are these aids that seem to require only the lazy approach? State and federal motion pictures, slide films and slide sets, state and federal posters, photographs and enlargements, pictures clipped from advertisements and magazine articles. (And don't worry about copyright suits for use of advertisements—advertisers are glad to have their illustrative material used beyond the printed page, even with the trade mark excised!)

Home demonstration agents know the value of visual aids. They use them constantly, though they may not think they do! Every time a home demonstration agent makes a demonstration she uses visual aids. These aids may be clothing, furniture, cooking materials. But anything that people see while learning is a visual aid. It's really as simple as that. The tragedy is that most workers use visual aids only when they themselves are present. With a little furbishing, many of their regular visual tools can be silent salesmen, selling the message of better living as an exhibit or window display, even when the agent is not there. More of this later.

Additional Examples of Visual Aids

There is another aspect of visual aids that is not given proper importance. The same projector that shows an educational film can show an entertainment film. Extension history is full of such usage, but it seems to need constant repetition.

A group of Georgia county agents pooled their resources and bought a sound projector. Their five counties were near to each other. The projector was booked in each county for a certain number of days. It was brought into a certain locality the same day of every month. The first Monday it was at a feed store, the first Tuesday it was at a school, and so on. Farm families knew that on that evening they could expect to see a movie by traveling only a few miles. Each monthly program consisted of several entertainment films, usually a cartoon for kids of all ages, sometimes a comedy

short, a travel film or other educational subject not closely related to agriculture, and several agricultural films closely related to problems in the five-county area.

Do you wonder that these counties had successful meetings and a high percentage of practices adopted? Do you wonder that their annual reports showed progress and interest and results?

A county agent in New Jersey is an avid photographer. He has been making color slides since the materials first became available. He has color picture records of most of the farms in his county, at least those which represent approved practices. But beyond that he has something more—imagination. On his vacations he takes his camera along, shooting every scene that will fit into his programs. One program covered the story of water. It opened with shots of rain clouds, beautiful scenes photographically and full of meaning to every farmer. The rain was shown as droplets on leaves and grass, as pools in properly contoured furrows, as soaking forest floors in the mountains, as forest streams running cool and clear. Since artesian wells were important in his county, these distant water scenes were important to his story. He showed pumps and water towers. He showed dry furrows and sprinkler pipes. He showed the artificial rain from the sprinklers and a busy market scene. After this slide set was shown at every farm meeting in the county, the twelve slides which told most of the story were mounted in a "Filmdex" viewer and placed before a light in his office so all that came in could see them.

A home demonstration agent in New Jersey carries 1,000 slides in her car, together with a projector and screen. The slides are divided into sets, each set made to illustrate a state or federal bulletin. When one of her clubs plans a program on one of these subjects she leaves slides, projector, screen, and bulletins at the leader's home. (Each leader is trained in projection.) The club members carry away the bulletins as memory pieces.

These and many other successful extension agents supplement words with visual impressions. They achieve results and spread themselves farther.

We've mentioned some visual aids that are photographic, one or two that are not. What others are there?

Exhibits at a county fair are the expected, but why not have exhibits all the year round? Store-window exhibits may be arranged with the cooperation of local merchants, banks, real estate and insurance agents. Lobby displays, particularly those of the participation type, have proved effective in many localities. A lobby display has the added feature that it is directly accessible, can contain a supply of literature, or a pad on which the names of those desiring literature can be written, and can be built so the viewer can operate or start an animated display. Gilbertson[2] has illustrated and described many such small exhibits, though he does not include the participation type and makes only brief mention of the viewer-operated type.

Chalk Talks Beat Charts

One cannot be long in extension work without meeting economics charts. Many people dislike them! Here's the story of two economists who could present their information in such a way that people en-

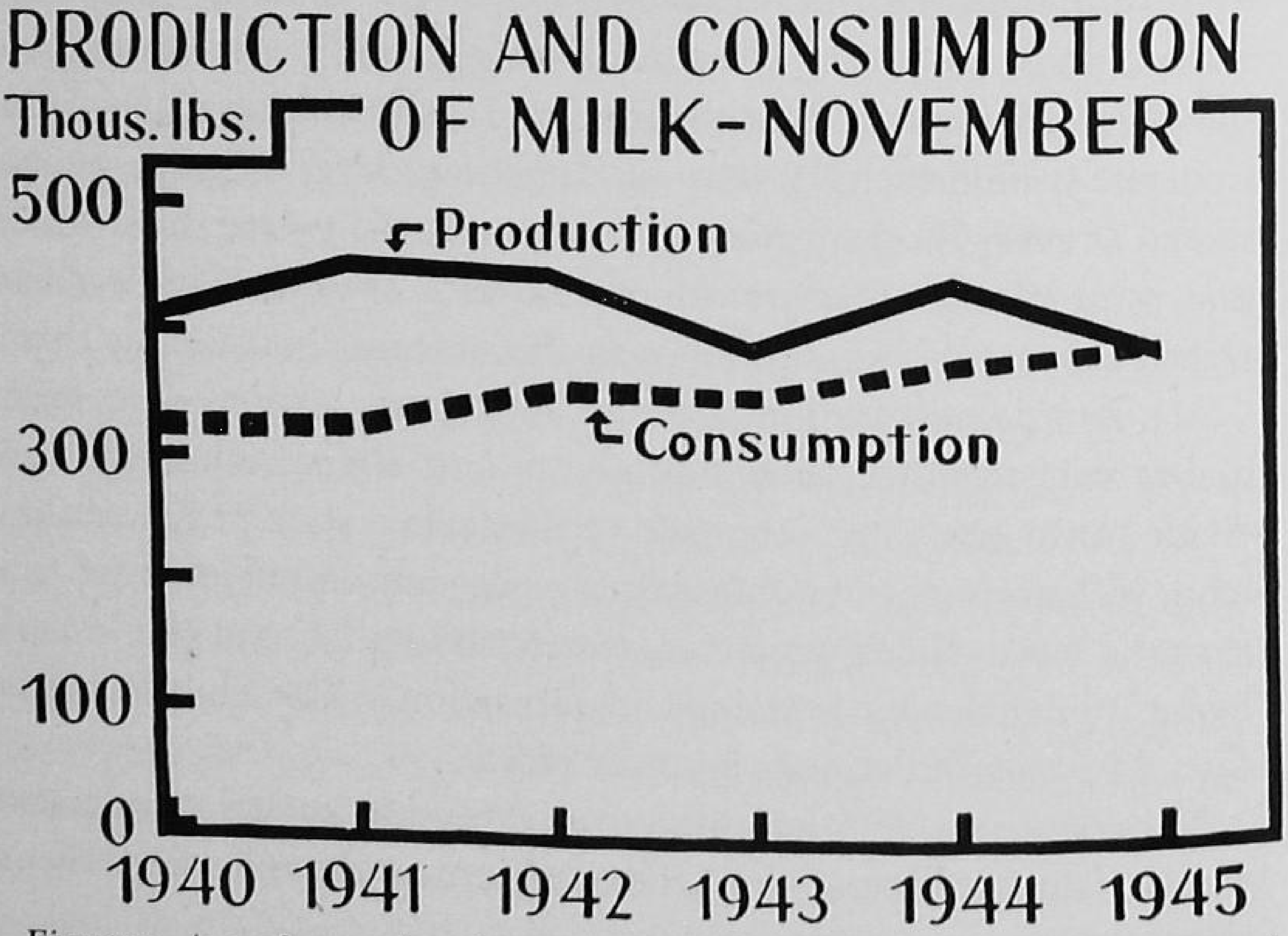

Figure 37. A graph on a chart for extension teaching should be simple and show only one idea.

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[2] *Educational Exhibits: How to Prepare and Use Them*, U.S.D.A. Miscellaneous Publication No. 634 (January, 1948).

joyed it and learned. Both were campus practitioners who left the campus where it belonged when they went out into the state. One of them developed a talent for chalk talks and the patter that went with the talks. As a beginner in chalk talks he prepared his sheets with a slight tracery of guide lines which the audience could not see. As he talked he used his vari-colored chalk to make the lines visible to the audience. This chalk talker used another old trick of showmen —he achieved variety by not keeping one picture too long; he broke his talk up into a number of units and developed each simply, separately. His economic information was carefully sugar-coated and extremely palatable.

The other depended less on entertainment, more on a straight but very intelligent presentation. He used a chalk talk of a sort, but it was purely graphic, without artistic embellishment. He had the wit to cast aside the forms of presentation intended for reproduction on the printing press and considered only the temporary nature of the day's talk. Instead of arriving at a meeting armed with charts, he arrived armed with rolls of blank paper. Blank, that is, except for delicate guide lines, data, and titles. He also had a box of colored crayons. As he developed his story, he likewise developed his chart, using different-colored lines for different information. No dots and dashes to strain the eye and memory, but a series of colored lines easy to distinguish from each other and to follow across the chart as the information was developed.

Since it is important that we convey statistical information, let us at least try to make it clear and easy to take. When working directly with a group we can easily present the information as in the two examples cited. In fact, that method of presentation is important in all visual work, we might even say in aural work.

Rules of Showmanship

The theme in all the examples presented is based on cardinal rules of showmanship. Showmanship need not be shoddy or cheap, though a few shoddy showmen would make it appear so. Showmanship is making people like what they get and making them want to come back for more.

The cardinal rules are simple: (1) little doses, (2) pleasing pres-

entation, (3) variety, (4) too little rather than too much—leave them wanting more.

A specialist in Kansas had a tailoring project. Tailored garments are not easy to make. They must be made just so. Learning tailoring methods takes time and lots of help from the instructor. Many clubs signed up for the tailoring class. With the help of the visual specialist a complete set of slides in color was prepared showing all the steps in tailoring a child's coat. This slide set served two purposes. She sent it ahead so that the agent could present the general idea to the clubs. Then when the specialist reached the county she ran the set of slides again as a prelude to the course, explaining just which steps would be taken up each day and presenting the finer details in a way the class could see. Most of the slides were close-ups of techniques, enlarged many times on the screen with equal visibility for all.

That is an important quality of photographic visual aids. With the camera's eye placed close to an operation, or condition, the eye of everyone in the audience is placed at the same close distance when the scene is projected on the screen.

Showmanship is important in extension work, no matter how much dignity we assume. After all, people expect a certain amount of leadership—not necessarily the aggressive type but the type that keeps things moving, makes meetings interesting, takes care of everyone's needs. Showmanship helps this type of leadership. "Little doses" means measuring the dose to fit the condition. It means knowledge of the subject and the ability to present the really important parts. Be sure to have something left to tell. Some of the variety may be achieved by a motion picture or slide presentation.

The primary objection to these points is that we can't exhaust the subject if we scramble the meeting. Should we exhaust it? Should we carry it to the point that everyone is sick of it? Or is it better to give everyone a little dose of it, to stimulate some action on his part, and leave it to those who are intensely interested to seek further information at a time when the whole meeting would not be involved and thus delayed?

Preparation and Presentation

Let's go back to point 2 once more. Suppose that in the interests of variety we are going to use entertaining motion pictures, some color slides on corn borer control, charts on market trends, and a slide film on fire prevention.

Pleasing presentation demands that we be at the hall early to set up the projection equipment, find the electric plug, check the light switches, and arrange with someone to turn the lights off and on by cue. We find the best place to hang the charts, set up the screen, and focus the projector. We also focus the slide projector.

Then we take the screen down and put the charts away. Why? If that blank white screen, and a curious looking chart, and a speaker all occupy the front of the hall at once, it's unfair competition for the speaker. Exception: if custom has it that the movie is run during warm-up time as a means of getting everyone there early, don't take the screen down until the movie is over, but then at least roll it up. If the screen must be moved in and out of position, make chalk marks on the floor at each leg so you can get it back into place instantly.

Don't hesitate to draft someone from the audience as a helper. Or draft a helper for each chore. They love it! Have one set up the screen, one turn the lights off, another hang the charts, and so on. If you can train one to run the slide projector while you talk, do it so *you can talk from the screen.* Arrange a cue for slide changes, like snapping the fingers. If you prepare for a meeting in this way, the presentation will move smoothly.

Audience participation meets a very human urge to be the center of the stage. You don't need a "Truth or Consequences" show (although it might pay off once in a while), but you can use practical methods of getting the group to take part in a talk instead of sitting still to be talked *at.*

Men, Maps, and Models

A county agent in Wisconsin had a land-use survey project one year. He prepared large maps of each township with natural features

and roads clearly and accurately marked. He also had model houses and barns, strips and chunks of rug cushion for trees, small blocks of various shapes to represent typical buildings, thin strips of wood for fences, and so on.

In a township meeting he would tack the map to a table and start from scratch. One couple would be asked to lay out their farm on the map. Since range lines were marked lightly it was a simple matter to locate boundaries. The fun usually started when the couple would get into an argument about the relative positions of the buildings. Then the field fences would be worked in, the wood lots, and so on. Then the crops would be penciled on the map, and that gave the agent his opening to discuss rotations, crops, pasturage, and the land-use problem. Sometimes neighborly aggravations would be brought out and solved. If a shift in use was decided on at the meeting, that plan was marked on the map in a second color. If the shift was to take several years, a color code was developed. If the farmer wanted it, the model materials were cemented in place with model airplane cement, his plat was cut out, and he took it home as a visual plan for his land-use program.

Dramatizing Helps

A popular method is to dramatize a situation, having members of the audience take part. Copies of dramatizations frequently can be obtained from specialists, and one copy for each "actor" should be at hand. Often an agent with a knack for writing can prepare a 5-minute skit to point up a need. It isn't necessary to rehearse—just hand out the parts for each to read. To lend an interesting air the play can be staged as a radio program, with simulated microphones, since radio actors may read from the scripts without memorizing.

Don't miss the chance to present 4-H teams. It gives the teams practice before fair time and can't fail to put across some information.

A variation is to interview someone who has adopted a practice and have him bring out the points you want to put over.

You say these suggestions are aural rather than visual. You don't

do them in the dark, and the visual part of the presentation is as important as the aural. The audience *sees* action.

Signs and Silent Salesmen

Now let us go back to what we briefly mentioned earlier—silent salesmen. The successful agent is constantly "selling" his services,

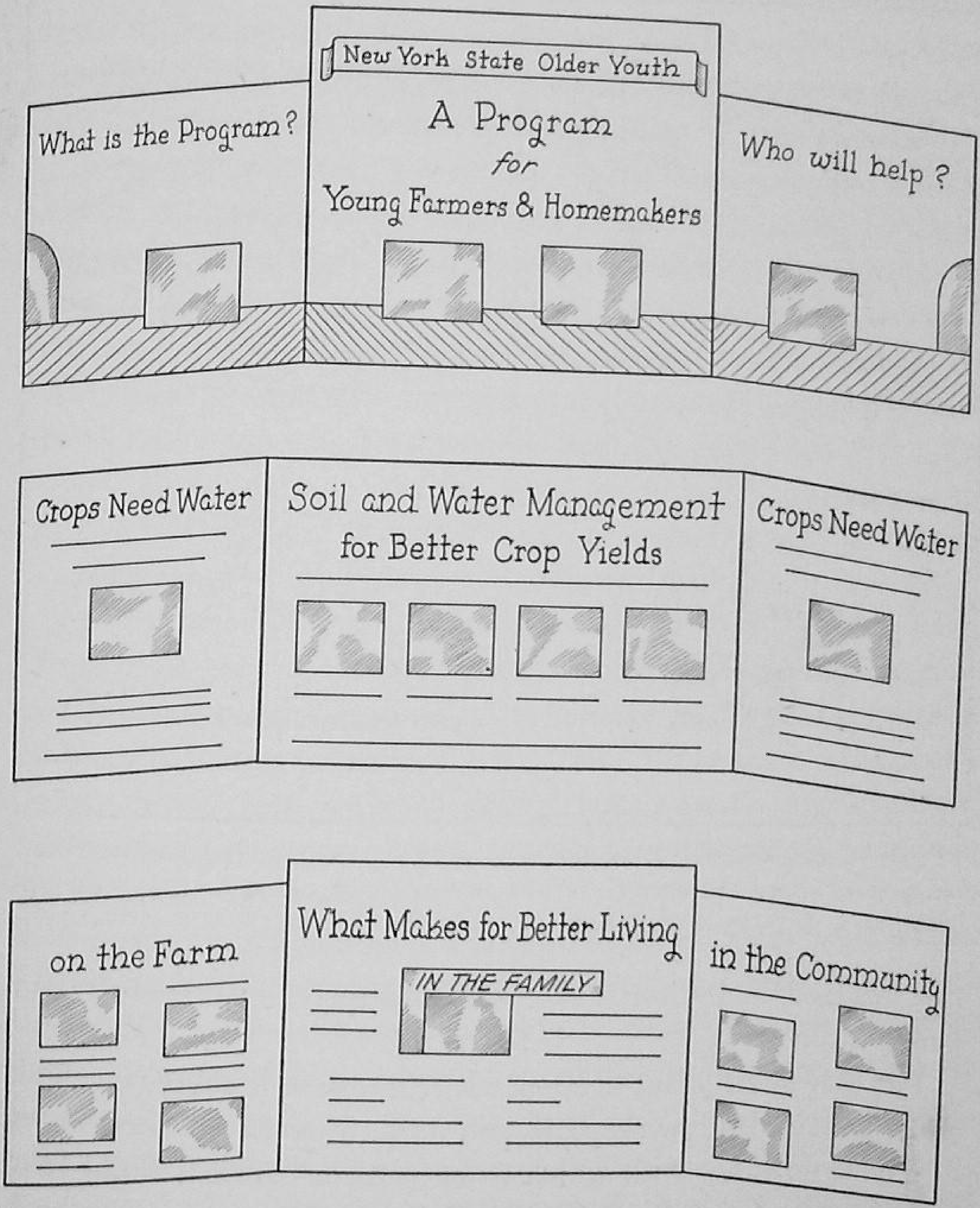

Figure 38. These simple panel exhibits, with one or two ideas to teach, are silent salesmen.

his information; "selling" farmers on the idea of adopting better practices. One agent can't personally reach every farm, so if he can "duplicate" himself in part and leave these parts where farmers pass by, he is extending his usefulness. That is where the silent salesman comes in. It may be a news-picture bulletin board, it may be a dis-

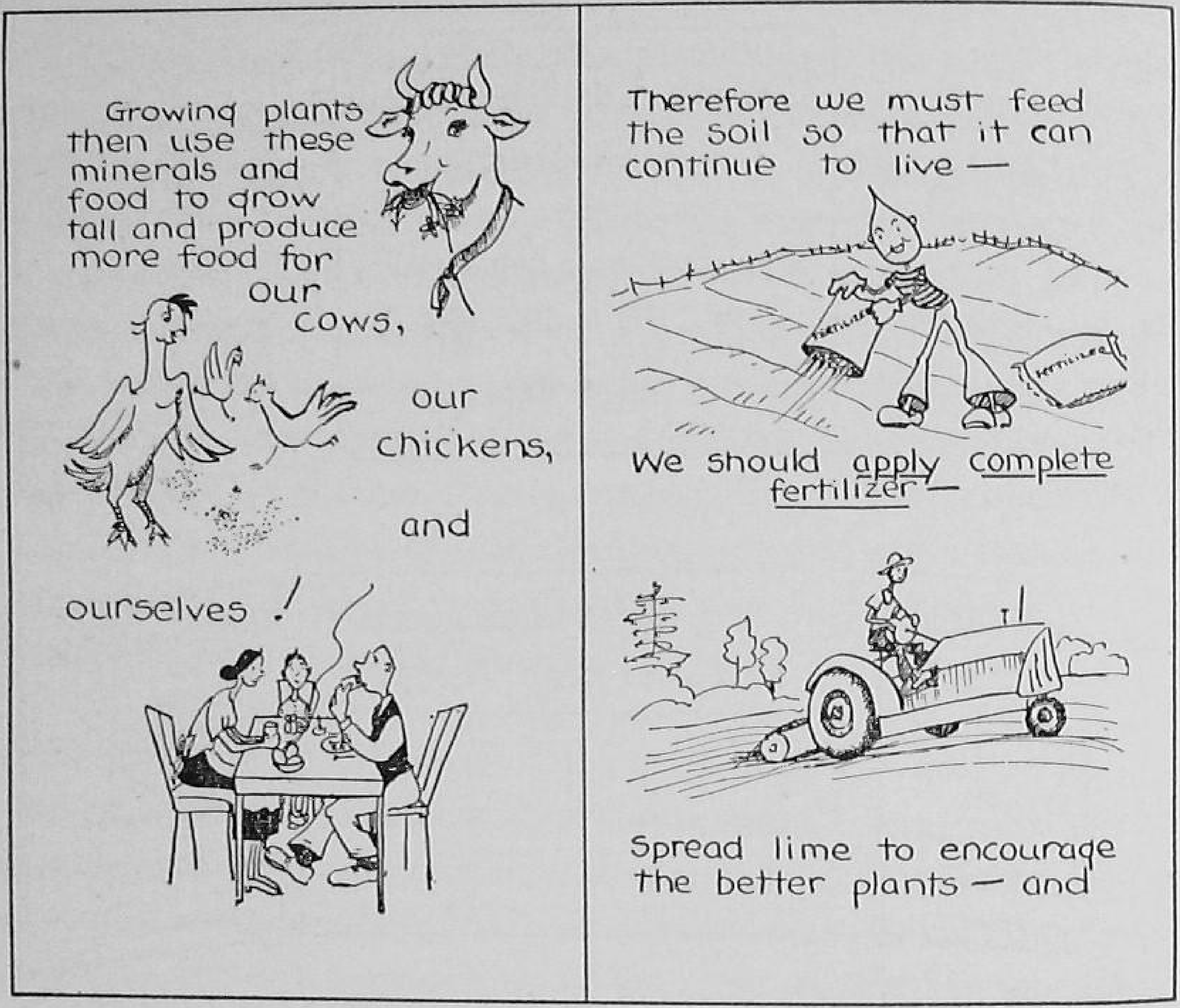

Figure 39. Line drawings as visual aids for boys and girls. Note the short statements and personal appeal characteristic of easy reading. These are pages from a 12-page folder, *Soil Is Alive*, by Harry A. Kerr (New York State College of Agriculture, 1948).

play in a bank lobby, it may be a window display or a demonstration plot.

You may be reluctant to adopt silent salesmen because you think you lack skill. Borrow the skills you need! Suppose you need signs and have no funds with which to have them painted. Build your signboards and give them a good priming coat of paint and at least one finish coat. Borrow a set of stencils and trace your letters out on paper, a word at a time. Rearrange these tracings on your sign until

you get a pleasing appearance. If the sign is just an announcement or acknowledgment, the letters can be all of the same size. Otherwise the important lines should be made of larger letters. Keep the number of words to a minimum.

You can borrow a pattern wheel from a local seamstress and roll it around the edges of your letters. This leaves tiny holes in the paper. Through these holes you dust lampblack, if a light background, chalk if a dark background. Then with a good brush and oil paint follow your dotted line to a successful sign. (Tip: ordinary house paint is too thin and runny for sign painting; thicken it with lead-in-oil.)

You might also get an alphabet proof of large wooden type from a local printer. It will cost you a couple of dollars. By perforating the edges of the alphabet you again acquire a stencil. You can also buy large paper letters in sets (try the toy counters of the dime stores). Art supply houses have die-cut paper letters on black and white. These can be glued to the sign and shellacked over for weatherproofing, or you can trace around them and paint.

Homemade Silk-Screen Process

Suppose one copy isn't enough. Suppose you want posters enough to plaster the county and have no funds. Then you borrow a trick from the ancient Chinese and use the silk-screen process. Large silk-screen equipment is expensive, but you can make your own cheaply. Get some bolting silk from the local mill, and staple it to a frame as big as your largest poster will be. Put hinges on one edge and fasten it to a table so the silk is next to the table, but the screen can be lifted by one edge.

Lay out your lettering on a sheet of thin wrapping paper such as butchers use. Lift the screen out of the way and tack the paper on the table. Now with a stencil knife or razor blade cut the letters out, cutting cleanly, but leaving the pieces in the sheet. When the whole design has been cut, lower the silk screen over the paper after removing the thumbtacks.

Silk-screen printing is done with thick paint. Special paints are available, but you can use regular paste paint, the type that is thinned with oil for house painting. Color it with colors-in-oil. Put a cupful

of the colored paste into the screen frame, right on the silk. Now with a stiff rubber squeegee, the kind photographers and window washers use, spread the paste across the silk, covering every bit.

Lift the screen and your paper stencil will go up with it, the paint causing it to adhere. Now pick the letters out, taking care to leave the "islands" behind. The islands are the parts inside hollow letters like o, e, b, and so on. If they become dislodged while stripping the letters, slide them to where they belong.

Now put a piece of newspaper down and lower the screen on it. Make sure there is a little surplus paint in the screen and run the squeegee evenly over the screen. Lift the screen and inspect. The amount of coverage will show on newsprint since you can't read the type through the letters when the coverage is good. Repeat several times if necessary to get a clear impression. Perhaps you need more paint if the impression is light. When the letters print right on newsprint you can start using the poster cards or paper with assurance of success.

If you want more than one color, you must use a separate stencil for each color. Make the last impression of your first color on a sheet of your stencil paper. Let it dry while you are cleaning up the screen, then lay out the words or design for the second color, cut and adhere as before.

Lay each sheet out to dry. This will take the normal drying time for paint. (Add some Japan dryer to your paste before starting. You can add it in the screen frame.)

This method is good for from 50 to 100 posters. It is widely used by sign makers who have short orders, or who fill in names on large posters furnished them for localization. If your run is to be more than 100 copies, it is better to use the conventional stencil film, which requires more skill and is more costly but is good for several thousand copies. An enlarged photograph can be pasted on a poster and the border design silk-screened around it.

Effective Posters

Posters are used frequently in extension work. Virginia True says, "A good poster involves two things, a potent idea and a clear pres-

entation of the idea through design. Anyone may have a good idea. It usually requires an artist to present the idea well, as this is a profession in itself. But anyone can be intelligently critical in his choices of poster material and in his use of posters."[3] The function of posters is to present an idea so quickly and simply as to cause action. One idea is enough. Details of what, where, who, and when are often needed, however. Your one idea must be presented both in concise words and in the illustration. Use short, accurate wording. Avoid double meaning or the possibility of misunderstanding. Can you get the idea at a glance? Is the drawing reduced to essentials in its line and color? Many fine lines are not so effective as one heavy bold line. One or two colors are more effective than several. Try various arrangements until you have one which is pleasing. Group those words which naturally go together. Place the part to be seen or read first in the most prominent position.

Good books on poster designing are available in an art library. During the war years many fine articles were published in magazines.[4]

Attractive posters and signs can be made with cutout wood or composition letters. These and other supplies can be purchased from sign and art-supply houses. If you have a jigsaw you can cut your own, with the help of a master alphabet. For outdoor use, solid wood, waterproof plywood, masonite, and other weatherproof materials are to be preferred. For indoor use, ordinary cardboard, wallboard, or indoor plywood may be used. Be sure to have the letters large enough.

Window Displays and News Panels

Window displays can be a combination of signs, posters, photographic enlargements, models, drawings, actual equipment, products, or live action. Live action is particularly good for special events. A 4-H team can give live demonstrations in a store window on market day and will attract much favorable attention. Don't let the

[3] "Effective Posters," in *Report of Northeastern Regional Workshop on Rural Housing*, Cornell University, September, 1946.

[4] See files of *Design Magazine*, *American Artist*, *Art and Industry*, *The Studio*, *Art News*, and *Magazine of Art*.

demonstration take more than 10 minutes, and have the team well rehearsed. Provide a loud-speaker system with the speaker above the store window or door, the mike inside. Have one member of the team handle the mike throughout so that those doing the demonstra-

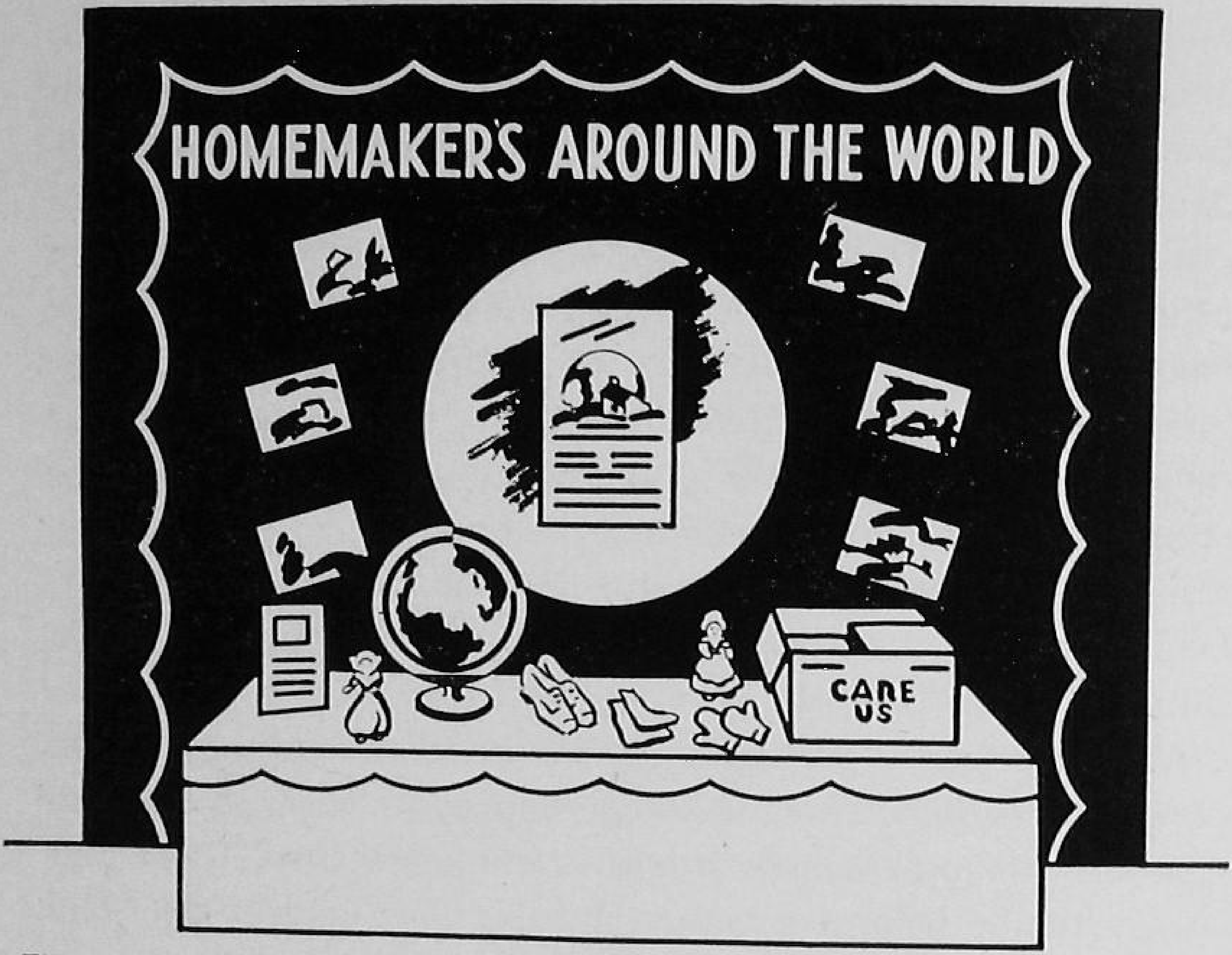

Figure 40. You can arrange a small exhibit with a back panel to serve as a silent salesman or a window display.

tion are free to move about as necessary. Don't have extra, nonworking personnel in the window. If a helper is needed occasionally, have him come forward when needed and retire when his part is finished.

Much window display material is hidden in store basements. You will even find animated displays tucked away. All they need is a coat of paint to hide the previous message, and your message painted over that. Lots of die-cut floor easels can be adapted to extension needs once they have outlived their commercial usefulness. Ask the local merchants to dig them out, or save the new ones for you when they are finished with them.

Exhibits, window displays, and posters have one design require-

ment in common—simplicity. Each is designed to do only one job, to attract attention to a desired practice, and it should not be complicated by wordy captions, dull statistics, or cluttered pictures. It

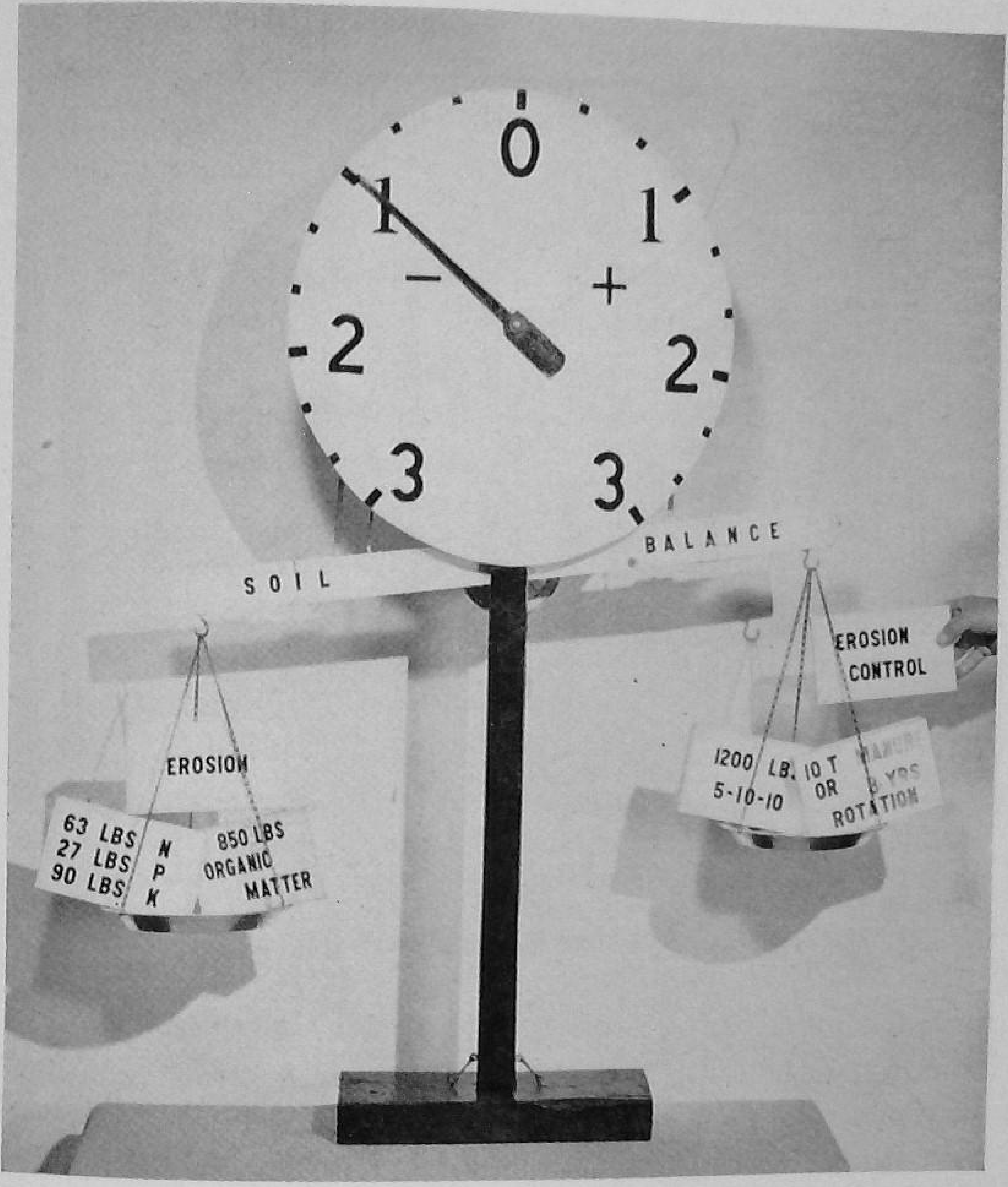

Figure 41. This teaching device shows how erosion upsets soil fertility. It can serve as a visual aid while you explain methods of controlling the erosion.

should be simple in design, simple in wording, and point to a source of complete information.

Although the display is intended only to attract, it should attract in such a way that the viewer wants more information. A simple way of doing this is by establishing "news panels" at various points

through the county. These consist of small wooden frames designed to take an 8- by 10-inch picture in the upper panel, a text of not over 50 words in the lower panels. A suitable heading, such as "County Extension News" or "Farm Bureau News," should appear at the

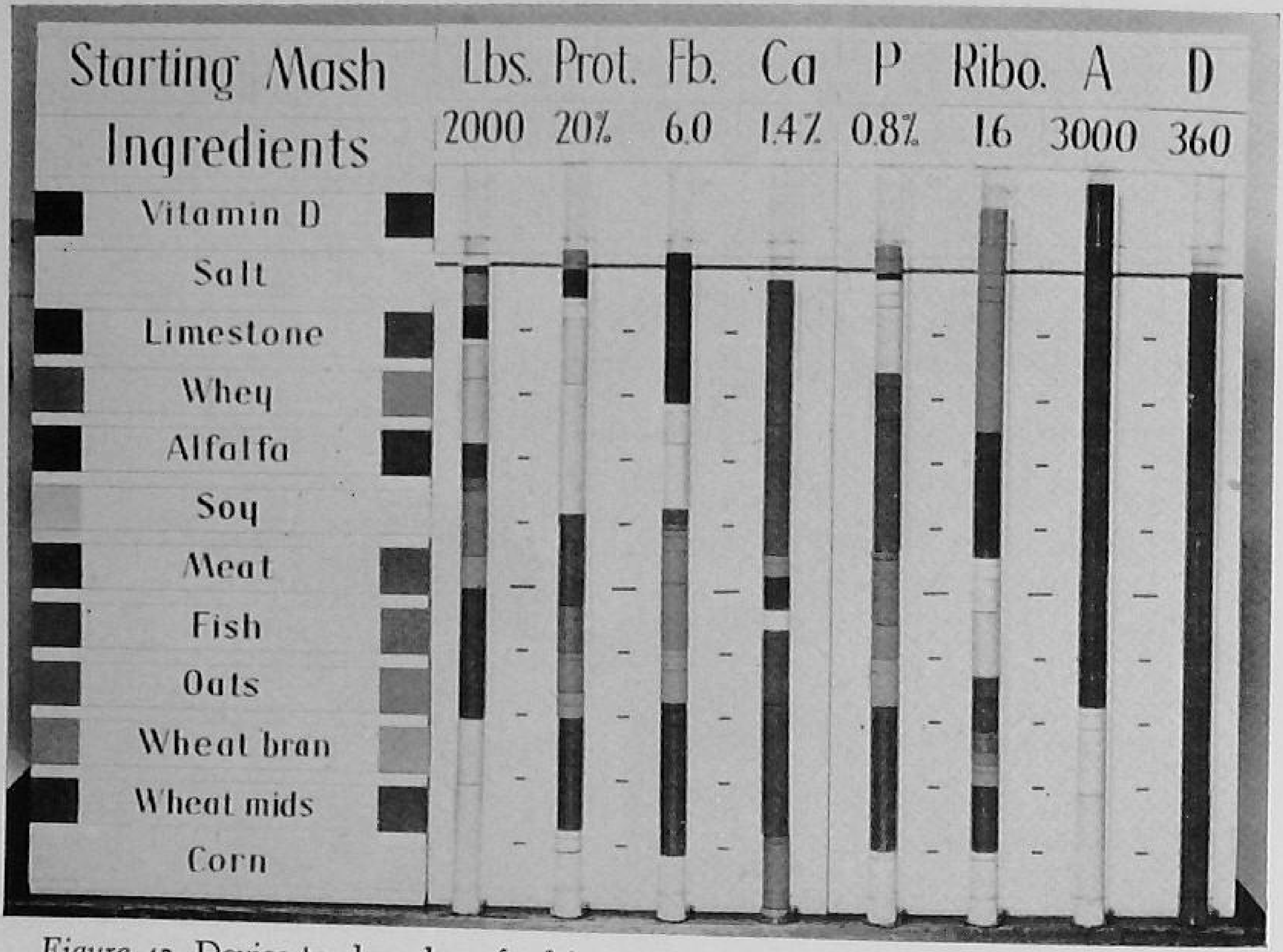

Figure 42. Device to show how feed is mixed to give a desirable formula. Each feed ingredient is given a color. Wooden blocks, about broom-handle size, are colored and cut in lengths to show what each feed adds to the mixture. The demonstrator drops the blocks, beginning with corn, into the glass tubes and builds up the desired mixture.

top of the board. The pictures should be local scenes; the type should be large enough to read. Panels should be changed at least monthly, preferably twice a month.

Have an Extension Album

Another visual aid, strictly photographic, is a variation of the old family album. Local proofs of successful practices are always received better than all the documentary evidence you have from outside. Over the year, or years, the agent collects a picture record of practices, ideas, and results. These can be in black-and-white or color. Mount the black-and-white prints or small enlargements in an al-

bum. Type a caption for each picture, giving dates, names, and all pertinent information. The caption need not be brief. Mount it with the picture or on a facing page. Assemble all proofs of a common practice together, or run them in before-and-after sequence for direct comparison. You will gradually fill an album with each practice. Some of these may be kept on the agent's desk, but the best place for them is on a table in the waiting room. When folks have to wait to see the agent, it gives them something to read. The bulletin rack should be close by, and pertinent bulletins, or just the covers, may be mounted in the albums. This is a particularly effective form of the silent salesman since there is no wasted circulation.

If your pictures are all made in color, you can get inexpensive prints in the 2¼- and 3¼-inch size and mount them just as you do the black-and-white prints.

In conclusion, more education can be gained and more quickly through the eye than through the ear. The eye recognizes *things* more quickly than it does *symbols*—and words are just symbols, nothing more.

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CHAPTER XXVI

Demonstrations and Group Methods

THERE is a saying that seeing is believing. This is not always true. We have a peculiar habit of accepting some of the marvelous things about us without question, while we doubt and require proof for other things that are quite simple. We suspect all new things and dislike to be disturbed. We have eyes, yet see not the full meaning of things.

Extension work grew out of an early effort to teach new farm practices by showing evidence of success. The story of "demonstration work" as told by O. B. Martin,[1] "the fighting prophet of the demonstration idea," is an interesting account of pioneer work which should be familiar to every extension worker. The county agent, more than most people, has to live with the results of his teaching. The idea of demonstrating recommended practices was behind all the early progress in extension work. Although the demonstration method may be most convincing it has its shortcomings. While extension work has an exceptional opportunity to use actual materials and equipment in its teaching, there are many times when these objects cannot be brought to the place nor at the time an audience is gathered. Demonstrations must above all be practical. Demonstration farms have usually failed because the first reaction of a farmer is, "That may be all right on that farm, but it won't work on mine." But farm demonstrations or trials under normal conditions on one or several farms in a community have proved of great value. These are usually put on by cooperators or demonstrators.

[1] *The Demonstration Work* (San Antonio, Texas: The Naylor Company, 1941).

A demonstration must be distinguished from an experiment. A demonstration proposes to show a known truth. An experiment is a search for truth. Never try to demonstrate a practice unless it is based on adequate research. Scientific experiments require check plots, cross-checks, multiplication of results, and many other technical processes which are hardly possible on the farm. If, however, a progressive grower wishes help to "experiment," for example to run a seed trial in some field of particular concern to him, it is well to give him assistance. Farmers are able to carry on such trials and draw their own conclusions locally. The results of such work are not the basis of recommendations used by the Extension Service. A few such trials are not to be compared in accuracy and value with the results of successful practice on a large number of farms as determined by survey or supported by accumulated data, for those facts are quite as important as those discovered by our experiment stations.

Method Demonstrations [2]

A method demonstration is used to show how to carry out a practice, for example, how to can, how to mix spray materials, how to build a terrace, how to make a slip cover. The demonstrator, an extension worker or a trained leader, before conducting the demonstration, takes four steps:

1. He decides how much skill is expected, and how soon the individual should acquire this skill.
2. He lists the principal steps in the operation, emphasizing the key points.
3. He has ready the right equipment, materials, and supplies.
4. He has the work place properly arranged.

In conducting the demonstration the demonstrator finds out what the individuals already know about the practice, gets them interested in learning the practice, and places the learner in the correct position to do the work.

The practice is presented to the individual and group by carefully and patiently telling, showing, illustrating, and questioning. The key

[2] Excerpts from *Guide for County Extension Workers*, published by the Extension Service of Missouri.

points are stressed. Instructions are given clearly and completely, taking up one point at a time, but no more than the individual can master. The individual is given opportunity to try out the practice. The learner is asked to tell and show what is being done, explaining

Figure 43. Practice in cleaning and adjusting their own sewing machines accompanies this *method* demonstration for homemakers.

the key points. The demonstrator should ask questions and correct errors.

The method demonstration is particularly valuable in training 4-H Club members, women's club members, leaders, office secretaries, and other small groups of individuals. It has been widely used to teach farmers new skills.

Any evidence of progress should be recognized, and the idea that "you can do it" should be emphasized.

In closing a method demonstration arrange for follow-up training. Successful method demonstrations are interesting. Use them in publicity and success stories for the press.

The Result Demonstration

A report prepared by the Missouri Extension Service gives a very satisfactory review of the result demonstration. Since the investment

in time and work is heavy it is used only when necessary to introduce new practices. The report [3] is quoted, with modifications, as a guide for the use of this method.

A result demonstration is a method of teaching, designed to show by example the practical application of an established fact, or group of related facts.

It is used to prove the practical application of basic facts to farm and home problems and is in no sense experimental except possibly in the mind of the demonstrator. With this method the extension worker can utilize the results secured from the adoption of a farm or home practice or a combination of practices to prove by comparison the value of the new method.

Some of the benefits which can be attributed to this method are:

1. When properly organized and successfully carried out a result demonstration of farm or home practices creates in the extension worker confidence in his or her recommendations. It also builds confidence and motivating interest in those who come in contact with the demonstration.

2. The demonstrator (farmer, homemaker, or young person) who successfully carries out a result demonstration becomes better trained in that particular phase of farm and home life and consequently may be of more assistance in the community.

3. Successful result demonstrations are conducted at the best places to hold farm and home meetings, tours, and such activities.

4. Press and radio services welcome material based on demonstration work done in the county by and for the local people.

5. Result demonstrations, carefully and consistently conducted, furnish a dependable check upon the basic soundness of recommendations and programs of work.

6. A well-rounded program of successful result demonstrations may serve as visual evidence that a worthwhile extension program is in progress in the counties and in the state.

Procedure for Result Demonstrations

Since the result demonstration is one of the oldest and most widely used methods of extension work, it is essential that it be understood by

[3] C. C. Hearne and others, *Guide for County Extension Workers*, University of Missouri, College of Agriculture, Agricultural Extension Service (April, 1945).

all extension workers. The following statements relative to result demonstrations should be considered when using this method of teaching.

Selection and Qualifications of Demonstrators

1. The demonstrator should be a local person selected by a community or county group. An extension worker may find it necessary to give guidance and assistance to such groups as to the part played by demonstrators, and other factors making for the success of the demonstration. The extension worker may sometimes find it necessary individually to select the demonstrator, but it is normally a less satisfactory procedure than election by a group.

2. The demonstrator should be conscious of his or her responsibility for the successful completion of the demonstration and its effect upon the community.

3. He or she should have the respect of the community. The teaching effect of the demonstration is likely to be greater where a farmer or homemaker carries on the work.

4. There must be a willingness on the part of the demonstrator for the demonstration to be used for teaching purposes such as publicity, pictures, meetings, tours, and personal inquiries.

5. The demonstrator has or will secure the necessary physical equipment, supplies, and materials to carry the demonstration to a successful conclusion.

Location, Adaptability, Economic Importance

1. The demonstration should be located in a community where there is a problem for which the practice or practices to be demonstrated offer a practical solution. The farm or home where the demonstration is to be located should have a very definite problem with reference to this particular demonstration. The recommended practices and equipment must be practical under that farm or home set-up.

2. If possible the demonstration should be located so as to be easy to reach for a majority of the people concerned.

3. A farm selected for a demonstration should be as nearly typical of the community as possible. Some of the considerations in selecting a typical farm are: soil fertility level; degree of erosion; soil type; drainage; equipment; kind, number, and quality of livestock; homestead; financial background; and other pertinent facts.

Procedure for Planning and Conducting the Demonstration

1. The county extension worker should write a plan of operation for the demonstration with the local demonstrator. Enough copies should be made to give one to the demonstrator, one for the county file, one to each specialist concerned, and one copy for the bound monthly report.

2. The demonstration should be set up to provide a comparison of results. If a comparison is not possible from the results of the demonstration itself, the results should be compared with previous experiences of the demonstrator, the community, or with results secured elsewhere.

3. A definite system of record keeping should be mutually agreed upon between the extension worker and demonstrator, and the demonstrator furnished with the necessary data, instructions, and blanks for keeping such records.

4. The extension worker should make provision for such follow-up as is necessary to ensure success of the demonstration. Demonstrations should never fail because the Extension Service did not furnish the necessary information, data, forms, or instructions.

5. A complete history of the demonstration should be written up. This should include past history, scope, plans, procedure, comparisons, performance records, and summaries.

Teaching through Result Demonstrations

The extension worker should draw up a teaching plan providing for time and methods of using the demonstration. This plan should be part of the county program and calendar of work. The agent and the demonstrator each need to understand the teaching use to be made of the demonstration. Such knowledge on the part of the demonstrator may increase his or her sense of pride in carrying on a high-type demonstration.

This teaching plan should at least show:

1. What meetings are to be held in connection with the demonstration, and when they are to be held.

2. What newspaper publicity is to be prepared in connection with the demonstration, and when it is to be released.

3. What circular letters are to be written using the demonstration results, and when they are to be released.

4. At what other meetings the results of this demonstration or a compilation of other demonstrations are to be used, and when such meetings are to be held.

5. What use is to be made of the demonstration results for charts, posters, pictures, tours, and other teaching methods.

The ideal result demonstration should consist of the carrying out (under the supervision of the agent) of practical and necessary farm or home practices by a selected demonstrator, who is conscious of having been selected, is willing to operate under a carefully prepared plan, and will keep the necessary records so that the value of the new method can be compared with known results from the old method. These results are to be used in meetings, publicity, and other methods.

The agent assumes full responsibility in seeing that the demonstrator knows what is to be done, how and when it is to be done, and where the necessary equipment, materials, and supplies can be secured with which to do the work; and in utilizing the teaching value of the demonstration to the fullest extent possible.

In Figure 44 is shown an improved kitchen designed as a functional working area. Reaching distances and the height of work spaces from the floor are based on measurements of the height and

Figure 44. Plans for this farm kitchen, a useful *result* demonstration, were made by extension workers on the basis of research. It not only saves space but also the energy of the homemaker. The open cabinet doors show some of the recommended arrangements.

easy reaching range of the housewife shown. Space is saved to conserve energy in moving about. Steps were counted, and much interesting "before and after" information is available for discussion when homemakers attend meetings at this result demonstration kitchen.

The result demonstration which was so important in the early days of extension in establishing confidence and proof of a good practice may not be so important later after progress has been made. Much depends on the stage of development within a county. If sufficient proof exists of the local value of a certain practice, the time spent in furnishing additional proof is largely wasted.

Tours and Field Days

A tour, like any other meeting, should be planned to teach specific farm practices. After the teaching objectives are determined, the stops for the tour should be selected in view of the objectives. A tour may be planned to deal with one specific subject, such as pasture improvement, or it may be more general and include several dairy farming problems. A dairy farm tour may show a pasture demonstration, corn and soy bean demonstration, a bull pen, proved sires, electric fence, ventilation system, herd with production records, alfalfa, and so on.

The number of stops depends, of course, on the distance to be covered. Often too many stops are planned. Provide plenty of time at each stop for everyone to see and hear about the things to be observed. Remember it takes time to move and assemble a crowd.

Provide a program and map of the tour for everyone, with space for notes, major points to be stressed, and references to bulletins. Indicate highway route numbers and landmarks where possible. Place signs where they will help.

Have definite signals for assembling and for leaving, and make sure everyone understands them and the importance of cooperating. Use a whistle or cowbell.

Mark cars conspicuously front and rear so there is no difficulty in following the cars in the tour.

Drive moderately; set the pace yourself.

Drop a man or a car at each turn if the tour is large. Provide him

with a sign or poster so he will be identified readily by those on the tour. Have one car bring up the rear which will pick up the men left at turns. In the case of smaller tours, the lead car should stop at each turn until all of the other cars are in sight.

Go over the route in advance to plan your schedule, preferably with the specialists who will cooperate. Give the specialists complete details. Select the best routes and avoid detours; check on them just before the tour.

Secure the cooperation of local and state police for police escort when necessary.

Provide for the safety of those on the tour by regulating the movement of cars when driving onto the highway. Avoid left turns from heavily traveled roads wherever possible.

Plan parking in advance, so that you know how you will turn the cars at each stop and where you will park them. On the tour direct the parking of cars at each stop. Avoid parking on highways if possible, and instruct all to leave their cars from the right side when near highways.

Make provision for lunch when on an all-day tour; this is always a problem. A public picnic ground or park often solves the problem of facilities such as tables, benches, and toilets. The noon stop is a good time for a short talk by the extension specialist assisting with the tour, or for contests of some kind for men, women, and children. It provides an opportunity to emphasize the things of importance seen in the morning, and those which will be observed in the afternoon.

Owners of homes and farms visited should be prepared. Each should know in advance what is expected and the things you particularly wish those on the tour to see. Each should be prepared to tell briefly about the things that are being featured at his residence.

Field days are generally held in summer on farms or in places where large crowds can gather to see field tests, machinery demonstrations, athletic contests, or other events best suited to large open spaces. Once the purpose, place, and program are established there are a number of other details easily overlooked. A loud-speaker installed in a car will aid in speeches and announcements. On-the-spot

radio recordings may be made by one radio station or by the Extension Service for distribution to several stations. Temporary toilet facilities for a large crowd may be needed. Care may be needed in the use of available drinking water. Plank bridges or culverts not

Figure 45. Potato Field Day in Erie County, New York. This type of meeting is well adapted to the needs of extension work.

subject to daily hard use may need to be reinforced. A landing field for flying farmers may help. Parking areas must be found. Some sponsoring organizations prefer to carry a temporary public-liability insurance policy covering the field day as a protection to owners and sponsors. Police will generally cooperate when needed. Food concessions may be arranged but should be limited to the refreshments needed for the comfort of those in attendance and should not be commercialized. Community organizations can usually provide such service with profit and dignity.

Contests and Prizes

Contests and fairs are among the oldest of human activities. In extension work they serve to—

attract attention,
stimulate interest,
provide action and participation,
give satisfaction and recognition.

You will note that these are the elements of good psychology and salesmanship. Properly handled contests set the stage for teaching. The enthusiasm of youth makes contests of special value in 4-H Club work. Adults often require much encouragement to take part. The competitive element in all contests must be strong enough to give zest but not so sharp as to cause those who take part to lose sight of the main purpose.

When a membership or enrollment contest is set up in a county, the main purpose is to secure more enrollments. If the contest winners are rewarded by a supper served by the losing side, it should not be too costly or burdensome, for many of the losing side have worked faithfully. Such contests should be fun and should never be taken too seriously.

Some points to be considered in setting up 4-H Club contests are:

1. Determine who is eligible.
2. Make sure all eligible persons are notified.
3. State a few simple rules clearly.
4. Be certain the contestants know the basis of awards, i.e., the essential points to be considered in making awards.
5. Be sure the judges have the same instructions as the contestants.
6. Try to make participation worthwhile even for those who do not win an award.
7. Provide credit for amount of work, quality, and improvement shown.
8. When the contest closes, notify everyone and use the winners to further the 4-H program through achievement days, district events, radio programs, and community activities.

In making awards it is important to recognize individual winners, but care should be exercised not to overlook the large number of individuals who worked hard and deserve recognition for what they accomplished. This is the delicate point in contest awards. When the intrinsic value of prizes is low and emphasis is placed on the honor of achievement, there is less danger of misunderstanding. Often only ribbons are awarded, and these may be distributed by groups or classes to spread the satisfaction among contestants. Some

of the recommendations made by a national committee[4] may be of interest here:

1. So far as possible, prizes and awards should be such that they will encourage development of the persons receiving the prize, for example; scholarships, educational trips, etc.

2. Prizes and awards should be adapted to mental development, needs, and desires of club members. For members over 15 years of age scholarships, short-course expenses, and educational trips are recommended as individual prizes, with club pennants, trophies, and trips as club awards.

3. The value of cash or material prizes should be commensurate with the effort expended.

4. Rather than offer one prize for the most outstanding work along any line, donors should be encouraged to divide the prize to include several 4-H club members who have shown creditable accomplishment.

5. Prizes for the club group as a group should be encouraged, thus promoting cooperation among 4-H club members. This will help to foster in the boys and girls a spirit of working with their neighbors for the common good, rather than of striving against them for personal advantage.

Achievement pins and leadership pins are usually earned as a result of following a given routine over a period of time. This is primarily recognition and is widely used in extension work.

Camps

As a group method with special functions camping has a firm place, especially for 4-H Clubs. It emphasizes cooperation, stimulates interest in all group activities and offers special opportunities for training in health, conservation, group action, arts and crafts, safety, wood crafts, and many other subjects. Camps broaden the horizons of young people and may teach them spiritual lessons that will be of great value throughout life. The quality of leadership and daily programs presents a challenge in the operation of camps. A camp institute to train counselors will help greatly. There are also administrative problems which must be solved. Too often the finances are

[4] *Recommended Policies Governing 4-H Club Work*, Report of the National Committee of the Land Grant Colleges and the U.S.D.A. on 4-H Club Work, Mimeo. No. 9577 (May, 1935).

handled loosely or without sufficient margin of safety. Because cash is needed to purchase food and supplies, a competent camp manager[5] should be appointed and a strict accounting made to the sponsoring organization. No camp should be conducted without full insurance coverage for public liability which may arise out of accidents.

[5] For lists of equipment, menus, and other suggestions, see Dorothy M. Proud, *Camp Kitchen Management*, New York State College of Home Economics Leaflet No. 2 (1948).

CHAPTER XXVII

Meetings and Conferences

MEETINGS, conferences, and demonstrations are the oldest and most important group method used in extension. The number of people attending extension meetings of all kinds in the United States has at times exceeded fifty million a year. Attendance falls off during wartime because of lack of farm help and travel facilities. Group methods in general comprise about one quarter of all the methods used by field workers.

Extension meetings are of great variety and form. Because a meeting is such a common method it might easily be assumed that anyone can conduct a meeting properly. It is not so simple as that. Some meetings are successful because of the great amount of interest and enthusiasm for the matter in hand. But most successful extension meetings require an understanding on the part of the leader of the function of meetings, careful preparation of plans, and attention to detail.

Function of Meetings

Meetings offer a setting for the use of any or all of our teaching tools, including (1) written or printed word, (2) spoken word, (3) action or demonstration, (4) participation or practice by the group, and (5) audio-visual aids. Meetings enable extension workers to meet personally many more people than they could otherwise. This personal acquaintance builds confidence, the foundation for all our teaching. After a person has seen the agent at a meeting he feels that he knows him even though there may have been no personal contact. After that, when the voice comes over the radio or the agent is quoted

in the paper, the person visualizes him in action. Meetings aid greatly in multiplying contacts. They make it possible to reach certain specific groups of people with special interests or special problems or in scattered locations. Through a meeting you can choose your setting for the teaching process. Then by the very act of having a meeting you have set in motion a community activity which is in itself local news of general interest to newspaper readers. Not the least of the value of meetings is the opportunity for leadership development. Some of the opportunities for those who attend regular meetings in an extension program may be listed as follows:

(1) Learning the value of organization.
(2) Practicing democracy in action.
(3) Practicing parliamentary procedure.
(4) Developing ability to think and speak in a group.
(5) Exercising leadership abilities.
(6) Developing social poise.
(7) Gaining information on subject matter.
(8) Developing appreciation of neighbors and rural life.

Types of Meetings

The purpose of a meeting and the choice of teaching tools to be used determine the type of meeting. These in turn are affected by the setting, available halls or places, the time of year, customs, and almost endless numbers of minor considerations.

There is no point in describing all the different kinds of meetings. However, certain types may be grouped together for the purpose of understanding the pattern of each and how it may serve most usefully. Some of these types are as follows:

Organization meetings, such as annual meetings, boards of directors' meetings, an executive committee or a 4-H Club meeting usually have an order of business set forth in written form in a constitution or bylaws of the organization. Such meetings are designed primarily to get business done and to take action. There is plenty of room for development of leadership and for all the above-named functions of meetings which involve learning, even though there is no formal presentation of subject matter. In some states the super-

visor and agent use a check sheet to go over all the details after a meeting to see how each can be improved. It is important to keep such meetings from getting "dry" or too bound by routine to be interesting. The process of holding a committee meeting is commonplace but will bear study and forethought.

Planning meetings have been partially covered in the program-planning chapters. The particular aspect of these meetings which requires emphasis is the kind and quality of the preparatory work done by the specialists and agents before the meetings. The bulk of the material presented as "situation data" and "outlook" comes from trained workers. Such workers must never dominate the meeting. Decisions must be left to the people. The setting should be such as to stimulate considered judgment and not merely a hurried approval of a ready-made plan.

Training meetings, more than any other type, are designed for a specific group, previously selected to take part. They are for teaching. Subjects are usually narrowed to fit the time available. Each meeting is likely to be part of a series. Concentration and intensive work are expected. This type of meeting comes nearer to simulating classroom instruction in schools than any other type of extension meeting. It has the advantage, however, that the trainees are working not for academic credit but for something to use immediately on the jobs for which they have accepted responsibility.

Special-interest-group meeting is an arbitrary term to cover a host of meetings used to reach a particular group. It may be a commodity committee or a group of dairymen, hog producers or sheep breeders. It may be a mothers' club, a diamond-ring club, a furniture refinishing group, or any group called for by the plan of work. It is important to see that lists of invitations are complete and that all who might be interested may come. This type of meeting enables a leader in the subject matter to move along faster and more intensively than he could in a mixed group. In fact, specialists often feel the more progressive people at such meetings pressing them hard for answers in the vanguard of experimental work. Because of the specialized enterprises in farming and divergent subjects in homemaking programs this is the natural and logical way to make progress in extension

teaching. Sometimes this type of meeting is provided by the Extension Service as an adjunct to a regular meeting of some organization.

Figure 46. A log-sawing contest attracts interest and furnishes a setting for a meeting to discuss various forestry practices in farm wood lots.

Community meetings are generally characterized by a mixed audience both in age and sex. With the growth of special-interest groups this type of meeting has been crowded off the program in some places. In the days of farmers' institutes it was the principal form of meeting in use. It has its place even today in spite of our specialization. Nothing can take the place of the community of interest and mutual understanding among men, women, boys, and girls which these general meetings provide. It is a sad condition of affairs when the men take little interest in nutrition, child training, and family living generally. Women, too, should be given an opportunity to understand the larger aspects of farm management and economics which affect family living so much. Boys and girls have a right to expect parents to be interested in their clubs and projects. The frequency of community meetings may be reduced, but their values should be preserved to the community.

Demonstrations. This type of meeting is discussed in Chapter XXVI.

There are many other ways of classifying meetings; the list above is only suggestive.

Planning a Series of Meetings

Assuming the program is drawn up and that the plan of work calls for a series of meetings, how shall these be planned? Ask yourself the following questions:

1. Who is the group of people to be reached?
2. When can they best come together?
3. How far can they travel? *Where* will people go?
4. How much time can be given to this series of meetings by the agent, the specialist, or other workers?
5. What kind of a meeting place is best suited to the teaching or the job to be done?
6. How shall we plan and release the notices by mail, radio, press, and otherwise?
7. What equipment, bulletins, or other supplies will be needed?
8. Who will preside and be responsible locally?
9. What does the specialist suggest about this series, and what does he need to know or prepare before coming to the county?
10. What local information is needed?
11. What records should be kept of the meetings?
12. Will any evaluation be made of this series?
13. What follow-up with those who attended or by using result stories in press and radio is advisable?

Effective planning of a series of meetings requires forethought and attention to details. It is one segment of a whole educational campaign.

Success with a Meeting

It seems trite to mention common physical arrangements, but unless someone is made responsible for heat, light, seats, ventilation, parking, checking, etc., it is surprising how easily these necessities may be overlooked and cause unpleasantness. Select a meeting place of a size suited to the attendance expected. If chairs are movable place the first rows well toward the front, though not too close to the speaker. After these are filled bring in additional chairs as required for the back rows. Have the front part of the room well

lighted, but avoid strong lights behind the speaker or glare from windows in front of the audience.

Arrange for a chairman who has the respect of people and the ability to preside. Don't be afraid to use a new or younger chairman. Give him help before the meeting. Be sure the chairman knows the purpose of the meeting and has an understanding of the Extension Service and its general program; this will help him in case someone tries to get action at a meeting that has not been called for getting action. If he is to introduce a speaker the important facts about the speaker should be given to him well in advance; then see that he gets acquainted with the speaker just before the meeting opens. Most college specialists prefer not to be called "Professor" or "Doctor" but just "Mr.," then nobody gets tangled up with titles. Introductions should be short and should tell who the person is and what he will do or say.

Open the meeting on time to reward those who were prompt. Keep it on time. Often it is well for the chairman to say, at the start, when the meeting will close so that the audience will be at ease.

A good extension worker expresses the conviction both by word and deed that the meeting belongs to the people, not to him, and that he is there to help them accomplish the purpose of the meeting. He calls on leaders in advance and discusses what will come up. He helps a few key leaders by giving them information but not by telling them what to do. He may prepare a suggested agenda, or order of business, with spaces for additions. Naturally the meeting should follow the announced purposes.

Help the chairman and speakers to relate the matter to local conditions as far as possible. Avoid overdoing either speaking or entertainment. Local committees often make this mistake and provide too long a program. If a meeting is well planned it will seldom be too long. (For the conduct of discussions, see suggestions later in this chapter.) Provide for a dignified and orderly close to the meeting while people are still interested, not after they are worn out.

Here again we can only point out some of the essentials since every meeting is a little different from others. Each has its own sequence of events which must be kept moving toward a successful close.

Conditions Affecting Attendance at Meetings

To find some of the facts which influence attendance at meetings, 893 adults in attendance at 32 meetings in 15 counties were questioned. These meetings were held during the winter and the spring. Some were county-wide, some were community or neighborhood meetings. Some were held at night, some during the day. Many types of subject matter and reasons for meetings were represented in this sample. The report[1] brought out the following points:

A letter, as compared to news announcements, was more effective in announcing a meeting. If only one form of announcement is used, the extension worker misses a considerable part of the possible audience. To get maximum audience, all possible ways should be used to advertise the meeting.

An increase in the number of issues of letters used to advertise a meeting increased the number of interested people present.

Over one-half of the people present at any of the meetings stated that their only reason for attending was interest in the subject.

In announcing meetings, the subject to be discussed should be given prominence because of interest in it.

There was a slight preference for night meetings, though 40 per cent of the persons indicated that they would have attended regardless of the time held.

Night meetings did not attract people from as great a distance as did day meetings.

People present at night meetings had a wider variety of reasons for attendance than did people at day meetings; interest in the subject as an attendance reason was less important than in daytime.

Methods of Presenting Subject Matter at Meetings

In the second part of the study discussed above, data were collected through a farm-to-farm survey of the adults who had previously attended a poultry or a dairy meeting. Three hundred and ten adults who had attended one of a total of 34 meetings were

[1] Abstract from a thesis presented by Cannon C. Hearne to the University of Wisconsin for the degree of Master of Science, 1932.

interviewed. The purpose was to study the effectiveness of methods of presentation of subject matter and some of the differences between day and night meetings.

One conclusion can clearly be drawn from the facts presented; the lecture-only method of presentation was the weakest of the five methods studied. It ranked fifth in the number of farmers influenced and fifth in number of practices changed per farm. Of every 100 persons exposed to this method 38 were influenced directly to change practices. These 38 persons adopted 54 new practices.

By the use of discussion, or by holding a conference type of meeting, an extension worker increases the number of persons influenced and increases the adoption of better practices as compared to the lecture-only method. This type of presentation was 1.21 times more effective than was the lecture.

The use of local leaders in part of a meeting is a good extension teaching practice. This method, however, was but slightly better than the conference, or discussion type of meeting. Exactly the same number of persons were influenced by the use of a local leader as were with discussion. But the use of local leaders caused the adoption of seven more practices per hundred farmers exposed. This method ranked 1.28 times better than the lecture method.

A very substantial increase in the number of people influenced can be expected through the use of charts to supplement the lectures. With the effectiveness of the lecture rated at 1, the effectiveness of the use of charts was 1.42.

The lecture supplemented by a well-made film strip was the most effective method of the five studied. This method was 1.55 times more effective than the lecture-only method, 1.13 times more effective than the chart, 1.27 times more effective than the use of a local leader, and 1.34 times more effective than the discussion type of presentation.

Considering all the meetings together, 46.1 per cent of the farmers exposed were influenced to use improved practices.

A comparison of day and night meetings showed that night meetings reached more people from a shorter distance and had a larger

total influence, because of the larger attendance, than day meetings. Nearly 50 per cent of farm people preferred night meetings.

In view of the facts that day meetings were preferred by 38 per cent of farm people, that 10 per cent had no choice of meeting time, that day meetings influenced a larger percentage of persons exposed, that the distance reached was greater, and that the extension worker has a greater percentage of interested persons present, there is a challenge to extension workers to use every possible effort to increase the attendance at day meetings. An average increase of eight persons per meeting was all that was required in the cases studied to make day meetings more effective from every point of view than night meetings.

Effective Speaking

Of all the five teaching tools mentioned previously the one most frequently used is the spoken word. It is the principal medium used at meetings; all others are supplementary. Every extension worker should know how to speak effectively, as a lawyer must know how to argue a case. An extension worker must know how to explain, to simplify, and to present facts in an interesting way. A specialist who prepares definite subjects to present in various ways is constantly working to improve his presentation, but a county extension agent is likely to fall into careless habits of speaking unless he is aware of the pitfalls inherent in his job. He makes a great many short, impromptu speeches, such as to introduce a speaker or read a report. These informal talks are generally on subjects well known to the agent, and he feels no need for special preparation. Compared to the number of these brief appearances in public there are relatively few times when he makes a formal address or is presented as "the principal speaker." Under such circumstances, a county agent must make doubly certain to think through what he has to say and how he shall relate it to the people's interests. He should avoid such things as leaning on a chair, or speaking in a hasty or ill-prepared manner from the side of the room. It is well enough for him to be modest and not to orate. But when he does speak, he should go up front where

people can see his face and lips; he should speak clearly and make every word count. This need not detract from a warm, friendly spirit.

G. E. Peabody's book, *How to Speak Effectively*,[2] was written with extension workers especially in mind. The whole burden of his message is to "have something to say, say it, then quit." If, as an extension worker, you haven't mastered this art, get Peabody's book and start working at it.

Discussion and the Conference Method

The theory behind discussions and the conference method is that no one person "knows all the answers." The Congress of the United States uses the conference method in legislative action to arrive at the final form for passage of a bill. Experts in the field of agriculture and home economics are the first to admit the value of discussions designed to show different experiences and practices at extension meetings. At any meeting teaching has not taken place unless there is some learning. There is a high correlation between learning and the amount of thinking as shown through participation in discussions. Some of the advantages of discussion as a teaching method are:

1. Experience and thought are shared.
2. Thinking is clarified.
3. Group interests and problems are discovered.
4. Group planning and action are aided.
5. The propagandists are checked.
6. Leadership development is strengthened.
7. Misunderstandings are more easily avoided.
8. Democratic processes are nourished.

The different forms of discussion have been given names which are aften used carelessly as if they were interchangeable. It would be well for extension workers to understand the different forms and to use the names specifically to distinguish them.

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[2] New York: John Wiley & Sons, Inc., 1942. This book also contains suggestions on how to conduct a meeting.

Forums

A forum is a meeting at which a number of people may express themselves on a given subject. Usually a leader announces the rules of the forum, and the subject is introduced by one or more formal speeches or brief presentations. Then volunteers speak from the floor, observing the limits of time set forth by the leader. Short comments, questions, and challenges are also part of a forum. A forum is speaker-centered and places emphasis on fresh facts and clarification of issues.

Round Tables and Seminars

A round-table discussion is primarily subject-centered. It puts emphasis on the quality and manner of thinking. This is enhanced by the close proximity of the persons involved, as they are generally grouped around a table with a leader.

A seminar is similar to a round table in many respects, for example, fifteen to twenty-five participants is a good number for either. But a seminar is generally speaker-centered and often has the classroom set-up.

A variation of those two methods provides a local leader with an outside speaker to start discussion or with so-called "resource leaders" in the group to bring in new or technical information.

Symposium

A symposium usually refers to a conference at which the views of several persons are given, one after the other; it seldom provides time for general discussion. In addition, the presentation of so many views at once is not a good way to start discussion; for it is confusing. If an attempt is made to have discussion after each talk, the meeting is apt to drag out too long. A symposium is well adapted to presenting three or four aspects of a noncontroversial subject about which, for example, technical information is best presented by several persons.

Panel Discussion

The panel method is for use with groups too large for round-table discussions. The panel consists of six or eight persons, selected for depth and diversity of understanding of a subject, with a capable chairman; they sit in front of an audience. After the panel procedure is explained by the chairman, he introduces the subject, and the participants discuss it in a conversational manner, but with raised voices, for about forty minutes; this is followed by about forty minutes of general discussion which is shared by the audience. Nobody makes a "speech." This method is excellent for attracting interest. The audience usually is bursting to speak when its turn comes. The setting is such as to permit the audience to forget itself while listening to the conversation of the panel. When the audience takes part there is the usual danger of too diverse comments and uncooperative or obscure contributions from the floor; to deal with them requires firm handling by the chairman.

When the panel discussion is in progress the members converse among themselves, and they may not require anything of the leader for several minutes at a time. The members should never be instructed to speak on certain aspects for certain periods. This would spoil the conversational style and turn the panel into a symposium.

Preparation for a panel discussion consists first in having the subject properly worded. The discussion is best when subjects are sufficiently controversial to bring a slight clash of opinion. The leader may send to the panel in advance an outline of how the subject might be broken down and handled. He could include some subordinate questions and possibly suggest a few definitions of terms as a basis for clear thinking. He may find it wise to limit the subject if the question is too broad. Never plan a panel discussion for less than an hour and a half, and close it when interest is high.

The leader is primarily responsible for success. Besides giving the subject an interesting and challenging start, he must stimulate, correlate, and guide the remarks along constructive lines. With an outline prepared beforehand, he listens carefully and checks off progress, at least mentally. He should avoid speaking too often and should en-

courage the attitude of inquiry. Other guides for a good discussion leader are:

1. Refer questions to persons best qualified to answer.
2. Note points too hastily treated.
3. Note assumptions not generally accepted.
4. Avoid bias, impatience, or offense.
5. Use a little humor to avoid tenseness.
6. Have a keen sense of proportion.
7. Restate questions, favoring the why-and-how type.
8. Guide the whole discussion adroitly to a purposeful conclusion, without dominating it.

When the time comes, a good leader can switch a question from the panel to the audience without a break.

Agree-Disagree Discussions

This method is based on the use of a list of "discussion statements" with which the group is asked to agree or disagree. The statements can be mimeographed for distribution. Their preparation requires expert knowledge and wording. For each statement there should be available references of fact and opinion that may be used for study before the discussion or for the follow-up after it. For a good example see *Dare Farmers Risk Abundance?*[3] The jacket to this booklet has a discussion guide prepared by Professor J. P. Schmidt of the Ohio Extension Service.

For conducting the discussion have a manager, who explains the procedure. Warn the group that the statements may be false or misleading. Divide them into groups of about five each, with one person leader of each. Talk over the statements and record the decision *of the group*, not of individuals. Give a five-minute warning and reassemble as a forum. Here the manager's job is to mold and guide the discussion as described for panels. Start with any one of the "discussion statements" on which there is general interest. Next, by a showing of hands from the leaders of the group, count the number that agree and those that disagree. Then proceed as a forum. The ex-

[3] National Planning Association, Washington, D.C. (800–21st St. N.W.), Pamphlet No. 56 (1947).

change of reasons for agreement or otherwise will stimulate further thought and add variety and interest. Have resource leaders or specialists available to help with the factual material. Participants usually want a showing of hands on all statements. The discussion manager may close with a brief summary. Careful consideration should be given to any demand that action be taken to publish the decisions arising from such discussions. Decisions in this case were made primarily to stimulate thought.

Group Decision Method

Experiments have been conducted in holding discussions that lead to decisions. The purpose is to attempt to improve group education methods. Democratic discussion is stressed rather than lecturing. No attempt is made to manipulate the group by high-pressure sales talk. The method is based on cooperation between the group leader and an expert. The subject is introduced by the leader, the situation and problem are well developed, and then the expert may suggest solutions. The trick is to get the group to want to do something about it and to decide as a group to undertake some change of practice or similar action. This will involve each individual in doing his part to try out the change or new practice. Ways of getting the results from individuals back to the leader are agreed upon and the meeting is closed. An interesting experiment, using this method, in changing food habits was directed by Kurt Lewin of Iowa State University.[4]

Laboratory on Group Development

Because of the increasing importance and value of the group approach, the conviction has grown that methods of conference procedure can be greatly improved. To this end a half-dozen universities and colleges cooperated in a training laboratory on group development. It was designed both for "basic studies of productivity in group functioning" and "to provide opportunity for observing, expe-

[4] *Relative Effectiveness of a Lecture Method and a Method of Group Decision*, Committee on Food Habits, National Research Council, Washington, D.C. (2101 Constitution Ave.), Mimeographed (1942).

riencing and practicing basic elements of the democratic group process." For all extension workers responsible for leadership training at any level, for conference programs and participation of groups, or for studies and evaluation of extension methods, the reports [5] of this laboratory have stimulating and constructive help.

Workshops

The term *workshop* applies to a special type of working conference, usually of a week or more in duration, with lectures, individual conferences, and emphasis on small working groups. The work sessions are under the guidance of consultants; they are so arranged that an individual participant can work on a special problem either individually or as a member of a group. An educational workshop is a device for facilitating intensive study of educational problems. Workshops are used mostly for professional improvement and in-service training. Success depends on having well-defined objectives and a homogeneous group vitally concerned with these objectives. Organization of the workshop is built around problems which the participants bring with them. The elements of a workshop program are:

1. Lectures by staff members.
2. Group meetings, with groups selected according to interest.
3. Individual consultation and study.
4. Informal discussions at odd times.
5. Inspirational or social events.
6. Library and other resources for study.

The conference starts with a program developed in advance but subject to changes by a steering committee of staff and participants which is formed the first day to carry through or replan the workshop. Procedures are kept flexible. Reports from working groups are usually bound in a final report and processed for limited distribution. The workshop idea is not well adapted to use with nonprofessional groups.

An outstanding pioneer in this work is Dr. Ralph W. Tyler of

[5] *Reports of National Training Laboratory on Group Development*, National Education Association, Washington, D.C. (1201–16th St. N.W.) (1947).

Chicago University. By 1948 about thirty workshops had been held in extension on a state and regional basis.

Further information about workshops is available in their reports [6] and also from the Division of Field Studies and Training, U.S. Department of Agriculture.

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[6] For example, see *Report of Northeastern Regional Workshop on Extension Supervision,* Cornell University, Ithaca, N.Y. (September, 1946) (Out of print but available in libraries).

CHAPTER XXVIII

Personal Contacts

ONE of the interesting things about extension work is the importance of personal influence. The job demands a lively interest in people and a sincere appreciation of the other fellow's viewpoint. If it is well done, therefore, people will like you. Because you are really interested in the person and his family, you smile as he talks about the things that interest him, and you listen carefully. The stage is now set—not for you to *tell* him what to do, but to suggest, to introduce ideas, to influence his attitude, and to stimulate his thinking.

The weight of the personal influence of extension workers in the United States has been demonstrated many times. This influence, combined with sound information, is basic to successful educational extension work. Your personal influence is necessary to develop a cooperative service devoted to the welfare of the community, to enlist every available leader, and to use every local resource.

In addition to knowing how to work with people, integrity is indispensable. Be aware of the spiritual values which permeate the lives of rural people. In rural communities more than in urban your personal life will be under scrutiny.

Farm and Home Visits

Nearly two million different farms and homes are visited each year by extension workers in the United States.

"A few extension agents in China own bicycles, but most of them travel around their farming areas on foot. Each one is located in a trading center and covers an area with a radius of 18 to 20 miles."

That is what Tsin Ching Chu, General Secretary of the Chinese National Extension Service, said while on a visit to Cornell University. In the United States you may not be faced with the problem of walking to a farm visit 18 miles from headquarters. If you are, you probably will be very certain, before going, of the purpose of the visit and its importance.

The farm or home visit can be one of the most effective teaching methods used in extension work. But it is also one of the more expensive methods used. For both reasons, planning a visit is important.

A farm or home visit may be used for any one or a combination of the following purposes:

1. To answer requests for help.
2. To acquaint the agent with the farmer or homemaker.
3. To become acquainted with problems.
4. To plan a demonstration.
5. To observe results of farm or home practices.
6. To encourage cooperation and participation.
7. To discuss agricultural policies and programs.
8. To explain a practice.

Think over the purpose of each visit so that you may prepare for it and make it effective. Preparation is important because it may determine your success as a teacher at that time. You need to know as much about the situation as possible—soil types, land class, enterprises, size, quality, and any other physical characteristics. A knowledge of the farmer and his family may be even more important. It is desirable to know the personal background, the family situation, as well as the intelligence, knowledge, initiative, and prejudices of the individual.

Not all of this information will be found in books, bulletins, or mimeographed letters. Part of it comes from observations, from voluntary comments of other farmers, and from other agricultural workers. The accumulation of this information may not be formal. It is usually part of that mass of information filed in only one place—your mind.

The Visit

When making a visit, be constantly aware of your role as a teacher, a salesman of ideas, a representative of the county Extension Service, of the State Colleges and Experiment Stations, and of the U.S. De-

Figure 47. The county agent talks with the farmer on the land. A farm visit keeps the agent posted on seasonal matters, tells him much about the quality and size of the farmer's business, and lays the foundation for the confidence necessary in group action.

partment of Agriculture. As such, you have prestige and a purpose. This visit is one method for carrying out that purpose. On the visit, you are the guest; the farmer is the host, and all of the commonly accepted courtesies should be remembered. Be a good listener.

The approach or introduction to a farmer should be friendly, optimistic, and purposeful. The first few remarks will indicate to you the farmer's attitude, and that may determine whether the visit shall be long or short. If you lack information about the farmer or his farm, a few questions and observations may provide you with it. Such questions need to be worded in a tactful, conversational manner.

Keep driving at the purpose of your visit; keep bringing the conver-

sation back to it and above the level of gossip. Keep in mind the programs and campaigns you are trying to develop. Remember that this individual may benefit from these programs and may become a demonstrator of practices to others. How fast the purpose of the visit is accomplished will depend upon the attitude of the farmer or farm woman and upon your own skill. At all times, be modest, patient, and cautious with suggestions until you have established confidence with the individual. Finally, you need to complete this visit and to get to the next one. As soon as the purpose is accomplished, end the visit in as tactful a manner as possible.

Be cautious in your reports of observations on a visit. Carrying tales or gossipping, reporting on a person's shortcomings in intelligence or ability is not in accord with extension ideals, and it is sure to destroy confidence in you. To report and publicize results of recommended practices successfully completed can be an important part of the work, however.

Farm people are usually hospitable, and you will receive invitations to lunch or dinner. It takes time to have lunch at the farm and to accept an invitation at the last minute may be embarrassing to the farmer's wife. On the other hand, eating lunch at the farm may give you an opportunity to become better acquainted. It is wiser, however, not to build up the reputation of accepting any and all invitations.

Make a record of the visit as soon as possible. If a request has been made for some bulletin or other matter, a follow-up slip should be made on the spot and the record completed then and there.

A limited study of home visits to 4-H girls [1] showed results as follows:

1. Visits significantly encourage project completions.
2. Visits do not significantly stimulate re-enrollment.
3. The home visit is effective in developing parent cooperation.
4. Home visiting is valuable to the agent because it gives opportunity to learn how well the existing program is functioning and in what respects it can be changed to meet old and new needs.

[1] Shippey, Jean, *Home Visits in 4-H Club Work, Broome County, New York,* U.S.D.A. Extension Service Circular No. 379 (1942).

5. Getting in touch with the leader in each community before the visits is valuable in furnishing a general background for the visits; a discussion with the leader after visiting helps to solve numerous problems.

6. Visits are valuable in determining project needs.

When there are several agents working in one county it is well to set up a system to record all visits. Have a field book with lists, made in triplicate, by towns and school districts. Place a symbol and the date after the name of each person visited. Have the office secretaries keep each agent's book up-to-date. This will result in more successful visits and wider distribution of them.

Interviewing on Surveys [2]

The technique for interviewing a person when making a survey or a study is somewhat different from that used in the farm or home visit. When the sole purpose is to get unbiased facts be careful not to influence the person. Avoid the role of teacher; let the interviewee tell his story. Questions should be carefully prepared to avoid implied answers.

In the Office

When a person makes the effort to come into your office for something, you have an opportunity for a personal contact without going out after it. Chances are that the thing wanted is of more concern to the visitor than to you. For this reason, you must train yourself to be interested and not give the impression of distraction or greater concern for other things. Have your office so arranged that your secretary makes the first contact and gets the visitor's name. Avoid giving the impression that you are hard to see. Many people who come to your office would like to see you personally if you are available. Often, though, if you are busy they prefer to accept a bulletin from your secretary rather than to wait an indefinite time outside your door. To discourage long, aimless visits, find a way of bringing

[2] For the basic technique of investigation see *Extension Evaluation*, Colorado A. & M. College, U.S.D.A. Extension Service (June, 1946), and Charles L. Fry, *Technique of Social Investigation* (New York: Harper & Bros., 1934), chap. iv.

the conversation to a natural conclusion. Ask your secretary if other visitors are waiting outside, or even get up and move about, not necessarily toward the door but just to suggest the break-up of the interview. But, above all, do everything possible first to make the visit a satisfactory one to the person who came to you.

Your personal correspondence (discussed in Chapter XXI) is written from the office and is another important source of personal contacts.

On the Telephone

In general take your cue about telephone manners from the operators. A good telephone voice is an asset. Courtesy at all times is the watchword. Identify yourself promptly to the caller, and end your conversation with "good-by" so that the other person will know when to hang up. Be calm when waiting for service; actually you never wait very long on a telephone. When you get impatient, look at your watch and see how seldom you wait more than a minute or two. Remember that rural lines are often multiple party lines. What you say on a telephone is not private even though it may be personal.

Keep someone within answering distance of your phone during business hours, and train him to get messages accurately, including correct names, places, and dates. When calls come in, try to answer promptly and not keep people waiting on the line. Use follow-up slips to avoid forgetting promises made on the phone at odd times and places.

Of course the telephone sometimes seems annoying, barging in on your breakfast and personal life; but it gets results. You will find a number of cases each week where a carefully thought-out toll call will save you miles of driving and hours of time.

In the Community

In most places a county extension agent is looked to as a public-spirited citizen of the community. As a result, he is often involved in service beyond the call of duty. Work with service organizations, churches, and social groups helps to multiply the agent's friends and

personal acquaintances. It widens his circle of influence and usefulness and improves city-country relationships.

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CHAPTER XXIX

County Office Management

THE OFFICE of a county extension agent is a place of business and should be conducted as efficiently as the office of a business concern. The spirit of cooperation which is part of the philosophy of the Extension Service should be manifest.

A good secretary is essential in carrying out the details of the office. She should keep the office neat and in order. She is important in the efficiency of all work within the county, since the best agent cannot maintain efficiency in the field if his office is not running smoothly. He cannot do his best work if his mind is cluttered with office detail. Since the duties of the agent are mainly in the field—about 40 per cent of his time is spent in the office—the secretary must be responsible for maintaining the office efficiency at a high standard to be of the greatest help to farm people. She should be made to feel that she is part of the Extension Service.

A weekly conference, preferably on Monday morning, of the agents and the office staff to outline the week's work insofar as possible is an advantage to all and contributes to cooperation and efficiency.

General Office Duties

The office should be so arranged that strangers coming in will not be in doubt as to whom they should go for information. They should be escorted to the proper agent and introduced. They should receive courteous and prompt service. If the information they seek is not available at the moment, they should receive the satisfaction of knowing when and where it may be obtained.

It is necessary for an efficient secretary to be a good typist and to take dictation accurately, but these duties are not always the major portion of her work. Many letters can be answered by sending a bulletin on the subject matter requested without bothering the agent. Routine letters can be prepared and laid on the agent's desk for signature. Naturally, the division of labor depends upon the number of secretaries in the office.

County mailing lists should be kept up-to-date with accurate names and addresses. Both the secretary and the agent should understand the regulations on the use of penalty envelopes, and care should be taken that there is not misuse of the privilege in sending mail.

Daily records should be kept on phone calls, meetings, and other information needed for monthly and annual reports. The major portion of the annual report can be prepared by the secretary from these daily records if they have been properly kept.

Although the agent should also know the bookkeeping system for county extension funds, the office secretary should keep the books, and she should do it in such a manner that the responsible persons will be able to know at any time the amount spent on salaries, travel expense, maintenance, and what the balance is.

The secretary should be familiar with the agent's calendars of work. She should remind him of letters and articles to be written and of needed follow-up work.

It is not always possible for the agent to know exactly where he will be at any hour of the day, but he should see that his secretary has his schedule as accurately as he can give it ahead of time. A listless "I don't know" reply to an inquiry as to where the agent is, or when he will be in, will influence rural people to doubt the efficiency of the agent. If it is possible for the agent to call into the office during the day from time to time, he may find there have been inquiries from people in the vicinity where he is working that could be taken care of that day instead of later.

An alert secretary can save an agent's time in many ways. She should organize her work with the idea of relieving him of as much routine detail as possible. The agent also has a responsibility in seeing

that she gets the necessary information and training with which to organize her work.

Callers on business should be welcomed by the secretary. Giving them due attention takes many hours in a day's work. But social chatting, especially with those from other offices in the same building, or on the telephone, should be discouraged. A farmer or homemaker coming into the office for information should not have to wait while the secretary discusses her new suit with a visitor from next door.

Filing

A good filing system is of vital importance in a county extension agent's office. General correspondence is usually filed in alphabetical order with special folders for the correspondents who have many letters. In some cases a cross index or separate file is necessary where the subject matter or project might be remembered but the name forgotten.

Subject-matter bulletins are of prime importance. Current and timely bulletins for which there is a supply available to rural people are usually filed in a bulletin rack where office callers can browse through them and choose those in which they are particularly interested. However, a reference file should be kept with single copies of more or less technical bulletins for quick reference by the agent or by the secretary in answering requests for information on specific needs.

Clippings from local newspapers of items the agent has written should be filed and kept for future reference. A scrapbook is sometimes the answer to the filing of newspaper material.

The filing of daily reports and records of meetings should be done carefully. The system should be known by the agent as well as by the secretary so that the work will not be interrupted in the absence of the secretary. Card files may be used for such records and kept on the secretary's desk for quick reference. Records are important as a basis for preparing reports. Without certain records and facts, it is impossible to make a true report.[1]

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1 For detailed suggestions see *A Handbook for You*, U.S.D.A. Extension Service (July, 1945). The various states have issued manuals for secretaries, which give suggestions for office management.

Office and Telephone Calls

Each week about 200,000 people call at county extension offices in person, and another 160,000 call by telephone. As mentioned in Chapter XXVIII, office and telephone calls to the county extension agent's office should be handled with promptness. A farmer or a homemaker making a call to the agent's office is justifiably expecting accurate information. If the information is not available at the office, he should be given the place or person to whom he should address his inquiry. If the agent is out of the office and information is needed on subject matter which is not available in a bulletin, the name, address, and telephone number of the caller should be taken and the information given to him as soon as the agent returns. If the matter is such that it would require follow-up, the secretary should make a memorandum on the call slip and remind the agent when a follow-up telephone call or visit is indicated.

Dictation and Mail

A secretary can be helpful by organizing the incoming mail for dictation of replies. She can (1) sort the mail according to importance or urgency, (2) make marginal notes about what has been done, or other facts, (3) attach related correspondence from the files, (4) obtain other essential information to make the dictation of a reply easier.

Dictation is not always simple. It is often necessary for the agent to make a complete outline of facts, arrangement, and final form before going ahead. He gives the stenographer the original letter so there will be no mistake about name and address. He tells her which letters require postage if he is also using the penalty privilege. Circulars mailed under penalty privilege give big savings in postage. A secretary should be encouraged to ask about doubtful matters immediately or at the end of a letter. She needs freedom to change sentence structure for clarity when she transcribes the letter; a little experience will tell how much freedom she should have in this matter. She should be told which letters are most urgent, and which, if any, she may sign in the absence of the writer.

Mailing Lists

A special effort should be made annually to bring mailing lists up-to-date. Local postmasters will assist in correcting existing lists, but they have no obligation to give out new names. Mailing lists and addressing plates should be arranged according to post offices. All mailing lists should be dated as of the last revision. If lists are typed on paper the carbon copies can be sent to committeemen and postmasters for correction. When addressograph plates are used, slips of paper can be addressed, and each year a packet of them can be sent out for revision in lieu of a typed list. These lists are the key to successful use of circular letters. The only way to reach a person by mail is to know his name and address.

Lists of names and correct addresses are valuable assets of the extension office. They should be kept for the exclusive use of the Service. If a commercially employed friend asks for copies of lists, an agent may point out that he has no authority to give out these lists. The friend may be directed to the postmaster for a box holder's permit; this will give him very wide distribution in rural areas.

Office Arrangement

In a study of working conditions for extension workers, made in 1947 by the Association of Land-Grant Colleges and Universities, it was found that clerical help and office space were adequate in very few states. It was recommended that clerical help be added in direct proportion to the number of professional workers. Each professional worker should have a private office.

The secretary, or one of them if several are available, should be near the door of the reception room to greet callers. Desks should be so placed that other secretaries will not be disturbed when anyone enters. Both general and localized lighting should be sufficient to do all work without eyestrain. A light meter is the only accurate measure of light. Reading and writing require 15 to 20 units. Glare should be avoided by not using exposed bulbs or having desks face windows.

Modern office equipment is such that much time and energy can

be saved by using folding, wrapping, duplicating, adding, stenciling, and other machines. By systematic budgeting and cooperative use, new office machinery can be added from time to time and much better service rendered. Secretaries should be encouraged to attend the state or regional training schools provided for them by the Land-Grant Colleges. Problems of personnel management may be discussed with state or district supervisors.

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PART V

How Extension Work Applies to Other Countries

Extension methods and techniques have been used to rehabilitate war-torn countries.

Principles of extension education may be applied in any country.

Conditions differ widely in the various countries of the world.

CHAPTER XXX

Principles of Extension Education as Applied in Other Countries

LEADERS in agricultural and home economics education in many foreign nations come to the United States to study extension work each year. Among them have been those from Brazil, Chile, Peru, Venezuela, Colombia, Ecuador, Mexico, Haiti, Costa Rica, France, Greece, Switzerland, Sweden, Iran, Syria, Palestine, Egypt, and China. Some of them have studied in the state colleges, some in the Department of Agriculture at Washington, D.C., and some small groups have visited different parts of the country observing methods. Many nations have already patterned all or part of a program of extension work for rural people after the system in the United States.

The Food and Agriculture Organization of the United Nations has made recommendations to certain countries which indicate that it will stimulate and aid the establishment of similar systems in other lands. The first mission sent by FAO to any country was to Greece. In the Greek Mission's Report[1] to the Director-General, Recommendation No. 56 states: "The Mission recommends that special facilities be provided for the training of personnel for employment in the extension services. . . . Extension work should be undertaken by personnel possessing specialized training and experience. In addition to a general knowledge of the conditions of rural life an extension worker should have had training in the basic fields

[1] *Report of the Food and Agriculture Organization Mission for Greece*, Washington, D.C. (March, 1947).

of rural sociology, agricultural economics, and in the methods and techniques of adult education."

In September, 1944, a conference was held in Washington, D.C., of technicians who were familiar with extension work or conditions in various regions of the world. These persons took part as private individuals, not as representatives of any agency, group, or country. The conference considered the contribution that extension methods of education could make toward the rehabilitation of war-torn countries.[2] Committee reports were prepared for regions of the world. Each of these reports indicated extension principles or guide posts which would make extension most useful to the people of the region. These principles or guide posts are fundamental regardless of where the work is being done.

The committee for the Balkans established the following guiding principles:

"Encourage the trend toward democratic administration of extension.

"Enlist local financial cooperation, however small, in supporting extension work.

"Enlist local cooperation in studying and determining local problems and needs.

"Emphasize always the educational nature of extension and encourage every trend in the direction of separating regulatory activities from the educational except where successful regulation depends upon education rather than force.

"Emphasize the value of informal instructional methods of extension as a means for educating youth, not only in agriculture and homemaking but in other vital interests of the rural community.

"Consider and develop any extension program with reference to existing national and local cultural patterns."

The principles emphasized by the committee for the Middle East apply to any culture. They were summarized as follows:

[2] *Conference Report on the Contribution of Extension Methods and Techniques toward the Rehabilitation of War-torn Countries* (Washington, D.C., September 19–22, 1944), U.S.D.A. Extension Service, and Office of Foreign Agricultural Relations (October, 1945).

1. *Aim and meaning.* The general aim and meaning of extension as an educational process can best be grasped by stating what it actually attempts to do. Extension endeavors to make available to rural people the fruits of scientific knowledge, with a view to bringing about more satisfying family and community life. It does this by creating within the individual the urge to achieve this goal and by showing him the way to do so. This entails such practical achievements as improved health, increased income, and more creative use of leisure time.

2. *The extension worker.* The ideal extension worker possesses several essential qualities. Of course, the person who has all these qualities is rare indeed. However, the more of them he possesses, the greater the likelihood of his success. Some of these qualities are:

a. Living experience and real understanding of the culture—the way of life—where he is to serve, be it a community, a country, or a region.

b. Action from a wider perspective.—Thorough identification with the local culture only might result in narrow vision, distortion of judgment, and mistaken notions of what constitutes rural progress. The corrective for this tendency is that the extension worker should keep in constant touch with outside situations and forces which shed more light on his local situation and give fuller meaning to it.

c. Adequate professional training.—This is an obvious qualification for any profession, but outlining it in the present case seems essential. This is necessary because of the still prevailing belief that extension is an activity anyone can undertake in connection with his specialized field of training. To be sure, an extension worker is an expert in a certain field, but he is more than that. His training should prepare him to be a community organizer, an adult educator, and a student of human behavior in general.

d. Willingness to learn from those he is supposed to teach.—This involves an attitude of scientific modesty, a genuine feeling that one cannot possibly know all about every subject or field. No matter how backward a rural community may be, or how great the gap that separates it from modern scientific knowledge, it may still have something to teach the modest and wise extension expert.

e. Willingness to keep in the background.—An ideal worker does not let his ego get the better of him. He does not seek satisfaction by proclaiming himself or having others proclaim him the leader or the prime mover, but rather by seeing the work he undertakes come to a successful

end. In helping others to accomplish their purposes, he counsels and does not try to dominate; he works with people and not for them.

f. Possession of an integrated philosophy of life. This involves at least three essential elements: (1) a belief in the fundamental dignity and worth of a human being as an individual and as an end in himself, with any extension project looked upon only as a means to an end; (2) genuine interest in his work; (3) a message to give and faith in its being worth while.

3. *Where and with whom does extension work begin?* An attempt by the field worker to answer this question may be taken as the first step in his program. The following are some guiding principles:

a. If possible, the initial project or projects should involve the whole community. This would insure stronger and wider support and eliminate possible friction and misunderstanding.

b. If the foregoing approach does not seem feasible, a beginning should then be made with those individuals and groups willing to cooperate and possessing prestige.

c. The community or locality chosen should be one that is best qualified for demonstrational purposes. It should be centrally located and fairly represent the prevailing conditions and problems.

d. Other things being equal, the program should be started in those communities or with those groups that are more tolerant of receiving strangers and accepting new techniques.

4. *Thorough acquaintance with the local situation.* This may be undertaken as the first or second step, depending upon how much the worker already knows about the locality:

a. This entails a general knowledge of the culture, with its main pillars or foundations and values. Such knowledge serves as a general background upon which the field worker can draw as the occasion demands.

b. The worker should make a study of the socioeconomic organization of the particular community or locality concerned, which has its own character and distinguishing features. Furthermore, within the community each group or institution has its particular historical background, which is influential in its present organization and in the behavior of its members. In a word, no changes should be started by the extension worker unless they are supported by a thorough knowledge of the community way of life, and until their full implications have been appraised.

5. *What projects should be undertaken?* No categorical answer to this

question can be made. One has to appraise the total situation and decide each case on its merits. With this qualification in mind, one may attempt a few generalizations:

a. Quicker and more permanent results might be expected if the program is started with projects that meet the felt needs or problems of the community. Active local support is likely to be given such projects and permanent interest in them maintained.

b. Another answer is that the program should begin with the more simple projects that can be finished in a relatively short time and show tangible results.

c. Or, projects that involve the whole community have a better chance of success and make a more auspicious beginning for an extension program than those that concern one or only a few persons.

6. *Specific educational techniques for carrying out projects.*

a. The project should be preceded by a preliminary educational campaign. This may not be necessary when the people are aware of the problem and feel the need for a solution. Frequently, however, the worker, not the people, sees the difficulty.

b. The worker should get the cooperation of as many people as possible before they go on record as opposed to the suggested line of action. Almost invariably some individuals in each community wait for a chance to express themselves negatively, especially when they are not consulted about a matter.

c. Another essential method is to make use of existing village organizations instead of attempting to create new ones. This means that the extension program should be formulated on the basis of what the people already know and have, and take into consideration their limited resources and their special techniques and practices. The promoter of an idea or line of action is naturally inclined to use his own background rather than the local situation as a base of operation.

d. Utilization of local leadership is another point the field worker should keep in mind. Each community has its own recognized leaders. Much better results can be obtained if projects are undertaken with the consent and support of these leaders. They know better than an outsider how to work with their people, and their people trust them generally.

e. Finally, let the enthusiastic extension agent not forget that his ideal goal is "of the people, by the people, for the people." He should remember that he is an outsider to the community and tomorrow he may not be working in it. Consequently, he should be constantly on his guard

against the common and tempting pitfall of building the program around himself as an indispensable center.

Another way of emphasizing principles was followed by the committee for Western Europe.

1. The countries of France, the Netherlands, Belgium, and Switzerland all possess a highly developed rural culture. Their cuisine is to be envied. The crop yields of Belgium and the Netherlands are among the highest in the world. These two countries, in particular, have effective systems of agricultural education and extension service, comprising both governmental and private (or church) organizations. Under these circumstances there should be no thought of sending agricultural missionaries from the United States to western Europe to teach the people there how to live on farms.

2. The development of effective education and extension programs is the responsibility of the private and governmental institutions of each country. No country has a monopoly on knowledge of agricultural science and of good extension practices. The United States, on its part, is making serious studies of extension work throughout the world in order to improve American procedures. Also, it is prepared to give, and is currently giving, to representatives of other countries programed demonstrations and training in extension practices that have proved desirable in the United States. Such mutual interchange of information is one of the most desirable contributions that can be made to a general improvement in agricultural practices throughout the world.

3. Many of the farms of France, Switzerland, the Netherlands, and Belgium are so small that those who farm them cannot hope to attain a desirable standard of living, even though extremely high crop yields are obtained.

4. Before any program is proposed for western Europe, careful analysis should be made of its costs, as the western European economy will not absorb the costly services for which American consumers are willing and able to pay.

5. Extension workers have learned that they can do effective work only if they understand the social groupings and the system of relationships and cultural values of the local society in which they intend to work. Each country has a number of divergent cultural groups and regional differences in economic and other customs. Thus in Belgium there are the differences between the Walloons and the Flemish; in France, be-

tween the winegrowers and the wheat growers; in the Netherlands, between the large dairy farms in the northwest and the smaller family farms in the south; and in Switzerland, between the different language groups. Such differences should be taken into account in the development of national and local extension programs.

6. The extension program should be flexible; it should be adapted to the needs of the people.

7. Local people should have a part in the formulation of their extension programs. This principle works especially well in the Netherlands and Belgium.

8. Successful extension systems require local general agents, who reside in the area long enough to enable local farmers to learn to have confidence in the agents and to seek their advice. There should be a sufficient number of these local agents so that all the farm people have access to advice on their problems. In addition to the local agent it is desirable to have commodity and other specialists serving larger areas.

9. The local extension agent should make a wise selection of the leaders and groups of farm people through which he can operate effectively.

10. Each local extension agent should develop a corps of paid or volunteer assistants. These assistants should be trained by the agent or by the extension specialists for the part they are to play in the extension program.

11. Since extension is primarily educational, the extension system ordinarily should be separated from inspection and regulatory work. However, close cooperation between inspectors and extension workers is desirable.

12. Both in the formal agricultural training and during the period of service in the extension system, the local agent should be provided with up-to-date information.

13. The agent should be sympathetic toward the problems of the farmer, and understand these problems. An example of the training that will produce this type of agent is the system in the Netherlands, under which agricultural students spend a certain period actually working on farms.

14. It can never be assumed that the people who are concerned in any program understand its objectives and techniques. Usually repetition of ideas and demonstrations is necessary many times before they will be understood and imitated.

15. Before adopting a large program, testing it out on a small scale in a local community is desirable to see whether the program will work, and to assure that adequate use will be made of the product and that markets will be available.

16. Research is basic to successful extension so that there will be something to extend.

The committee for southeastern Asia, Malaysia and other Pacific Island groups stated the principles that apply particularly to that region.

"Study the cultural and economic background of the people to be served. In all regions, it is important for an extension worker to recognize the local unit of society and to utilize the best type of existing community leadership as far as this is possible. At the same time, provision must be made in any continuing program for the constant training and retraining of leadership. Those chosen should be the natural leaders acceptable to the community, not necessarily those who first put themselves forward.

"The program should be a comprehensive one of which agriculture is a part.

"Use self-help technique whenever feasible with locally available materials and tools. Great improvements can be made by relatively simple and inexpensive means. Encourage people to do things within their ability to help themselves. Develop simple organization to this end. (Carrying out such a method necessarily involves intimate contact with people usually from the standpoint of one whom they know as a friend, preferably one living in their midst.)

"Adapt the subject matter and the teaching procedure to the educational level of the people whose behavior it is desired to change.

"Emphasize teaching through demonstrations, such demonstrations to be established by rural people themselves on their own farms or in their own homes, which will thus serve as teaching centers.

"Carry on educational work with adults at the same time that boys and girls are receiving instruction in schools. This is essential to insure an effective educational program. The content of both programs should be similar, even though details and methods may differ.

"Use a variety of channels through which to disseminate improved practices in agriculture and homemaking, emphasizing such mediums as the drama, leaflets, slidefilms, posters, and life-size models where possible.

"No program should be based upon extensive use of imported machinery or mechanical means.

"Personnel for the program just described should be carefully chosen. They should possess a desire to serve, be able to get along well with people, especially rural people, be sympathetic in their attitude and familiar with the customs and cultural background of the people they meet. Ordinarily success can only be achieved by workers who understand and use the language of the area. The Committee recognizes, however, that important contributions can be made by occasional outside specialists working through interpreters."

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Appendix [1]

ACT OF 1914 PROVIDING FOR COOPERATIVE EXTENSION WORK

[Smith-Lever Act]

AN ACT To provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July second, eighteen hundred and sixty-two, and of acts supplementary thereto, and the United States Department of Agriculture

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive, the benefits of the act of Congress approved July second, eighteen hundred and sixty-two, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts" (Twelfth Statutes at Large, page five hundred and three), and of the act of Congress approved August thirtieth, eighteen hundred and ninety (Twenty-sixth Statutes at Large, page four hundred and seventeen and chapter eight hundred and forty-one), agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture: *Provided*, That in any State in which two or more such colleges have been or hereafter may be established the appropriations hereinafter made to such State shall be administered by such college or colleges as the legislature of such State may direct: *Provided further*, That, pending the inauguration and development of the cooperative extension work herein authorized, nothing in this act shall be construed to discontinue either the farm management work or the farmers' cooperative demonstration work as

[1] For legislation concerning land-grant colleges and regulations regarding use of extension funds, free mailing privilege, etc., see *Federal Legislation, Regulations and Rulings Affecting Cooperative Extension Work* (U.S.D.A. Miscellaneous Publication No. 285, 1946).

now conducted by the Bureau of Plant Industry of the Department of Agriculture.

SEC. 2. That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.

SEC. 3. That for the purpose of paying the expenses of said cooperative agricultural extension work and the necessary printing and distributing of information in connection with the same, there is permanently appropriated, out of any money in the Treasury not otherwise appropriated, the sum of $480,000 for each year, $10,000 of which shall be paid annually, in the manner hereinafter provided, to each State which shall by action of its legislature assent to the provisions of this act: *Provided*, That payments of such installments of the appropriation hereinbefore made as shall become due to any State before the adjournment of the regular session of the legislature meeting next after the passage of this act may, in the absence of prior legislative assent, be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury: *Provided further*, That there is also appropriated an additional sum of $600,000 for the fiscal year following that in which the foregoing appropriation first becomes available, and for each year thereafter for seven years a sum exceeding by $500,000 the sum appropriated for each preceding year, and for each year thereafter there is permanently appropriated for each year the sum of $4,100,000 in addition to the sum of $480,000 hereinbefore provided: *Provided further*, That before the funds herein appropriated shall become available to any college for any fiscal year plans for the work to be carried on under this act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture. Such additional sums shall be used only for the purposes hereinafter stated, and shall be allotted annually to each State by the Secretary of Agriculture and paid in the manner hereinbefore provided, in the proportion which the rural population of each State bears to the total rural population of all the States as determined by the next preceding Federal census: *Provided further*, That no payment out of the additional appropriations herein provided shall be made in any year to any State until an equal sum has been appropriated for that year by the legislature of such State, or provided by State, county, college, local authority, or individual contributions from within the State, for the maintenance of the cooperative agricultural extension work provided for in this act.

SEC. 4. That the sums hereby appropriated for extension work shall be paid in equal semiannual payments on the first day of January and July of each year by the Secretary of the Treasury upon the warrant of the Secretary of

Agriculture, out of the Treasury of the United States, to the treasurer or other officer of the State duly authorized by the laws of the State to receive the same; and such officer shall be required to report to the Secretary of Agriculture, on or before the first day of September of each year, a detailed statement of the amount so received during the previous fiscal year, and of its disbursement, on forms prescribed by the Secretary of Agriculture.

SEC. 5. That if any portion of the moneys received by the designated officer of any State for the support and maintenance of cooperative agricultural extension work, as provided in this act, shall by any action or contingency be diminished or lost or be misapplied, it shall be replaced by said State to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to said State, and no portion of said moneys shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building or buildings, or the purchase or rental of land, or in college-course teaching, lectures in colleges, promoting agricultural trains, or any other purpose not specified in this act, and not more than five per centum of each annual appropriation shall be applied to the printing and distribution of publications. It shall be the duty of each of said colleges annually, on or before the first day of January, to make to the governor of the State in which it is located a full and detailed report of its operations in the direction of extension work as defined in this act, including a detailed statement of receipts and expenditures from all sources for this purpose, a copy of which report shall be sent to the Secretary of Agriculture and to the Secretary of the Treasury of the United States.

SEC. 6. That on or before the first day of July in each year after the passage of this act, the Secretary of Agriculture shall ascertain and certify to the Secretary of the Treasury as to each State whether it is entitled to receive its share of the annual appropriation for cooperative agricultural extension work under this act, and the amount which it is entitled to receive. If the Secretary of Agriculture shall withhold a certificate from any State of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the expiration of the Congress next succeeding a session of the legislature of any State from which a certificate has been withheld, in order that the State may, if it should so desire, appeal to Congress from the determination of the Secretary of Agriculture. If the next Congress shall not direct such sum to be paid, it shall be covered into the Treasury.

SEC. 7. That the Secretary of Agriculture shall make an annual report to Congress of the receipts, expenditures, and results of the cooperative agricultural extension work in all of the States receiving the benefits of this act, and also whether the appropriation of any State has been withheld, and if so, the reasons therefor.

SEC. 8. That Congress may at any time alter, amend, or repeal any or all of the provisions of this act.

Approved, May 8, 1914 (38 Stat. L. 372).

ACT OF 1928 EXTENDING THE BENEFITS OF THE EXPERIMENT STATION AND EXTENSION ACTS TO HAWAII

AN ACT To extend the benefits of certain acts of Congress to the Territory of Hawaii

Be it enacted by the Senate and House of Representatives of the United State of America in Congress assembled, That beginning with the fiscal year ending June 30, 1929, the Territory of Hawaii shall be entitled to share in the benefits of the act entitled "An act to establish agricultural experimental stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto," approved March 2, 1887, as amended and supplemented, and of the act entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," approved May 8, 1914, and of acts supplementary thereto: *Provided*, That the experiment station so established shall be conducted jointly and in collaboration with the existing Federal experiment station in Hawaii in enlarging and expanding the work of the said Federal station on cooperative plans approved by the Secretary of Agriculture; and the Secretary of Agriculture shall coordinate the work of the Territorial station with that of the Federal station and of the United States Department of Agriculture in the islands: *Provided further*, That the Territory of Hawaii shall make provisions for such additional buildings and permanent equipment as may be necessary for the development of the work.

Sec. 2. To carry into effect the above provisions for extending to Hawaii the benefits of the act of March 2, 1887, and supplementary acts in the order and amounts designated by these acts, the following sums are hereby authorized to be appropriated in addition to the amounts appropriated to the Department of Agriculture for use in Hawaii: $15,000 for the fiscal year ending June 30, 1930; $20,000 for the fiscal year ending June 30, 1931; $22,000 for the fiscal year ending June 30, 1932; $24,000 for the fiscal year ending June 30, 1933; $26,000 for the fiscal year ending June 30, 1934; $28,000 for the fiscal year ending June 30, 1935; $30,000 for the fiscal year ending June 30, 1936; $50,000 for the fiscal year ending June 30, 1937; $60,000 for the fiscal year ending June 30, 1938; $70,000 for the fiscal year ending June 30, 1939; $80,-000 for the fiscal year ending June 30, 1940; and $90,000 for the fiscal year ending June 30, 1941, and thereafter a sum equal to that provided for each State and Territory for agricultural experiment stations established under the act of March 2, 1887.

Sec. 3. The permanent annual appropriations provided for in section 3 of said act of May 8, 1914, and of acts supplementary thereto are hereby authorized to be increased by an amount necessary to carry out the provisions of this act but without diminishing or increasing the amount which any State is entitled to under the provisions of said act of May 8, 1914, and of acts supplementary thereto.

Approved, May 16, 1928 (45 Stat. L. 571).

APPENDIX

ACT OF 1928 PROVIDING FOR FURTHER DEVELOPMENT OF AGRICULTURAL EXTENSION WORK

[Capper-Ketcham Act]

AN ACT To provide for the further development of agricultural extension work between the agricultural colleges in the several States receiving the benefits of the act entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, and all acts supplementary thereto, and the United States Department of Agriculture

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to further develop the cooperative extension system as inaugurated under the act entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of the act of Congress approved July 2, 1862, and all acts supplementary thereto, and the United States Department of Agriculture," approved May 8, 1914, there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of paying the expenses of the cooperative extension work in agriculture and home economics, and the necessary printing and distributing of information in connection with the same, the sum of $980,000 for each year, $20,000 of which shall be paid annually, in the manner hereinafter provided, to each State and the Territory of Hawaii which shall by action of its legislature assent to the provisions of this act. The payment of such installments of the appropriations hereinbefore made as shall become due to any State or Territory before the adjournment of the regular session of the legislature meeting next after the passage of this act may, in the absence of prior legislative assent, be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury. There is hereby authorized to be appropriated for the fiscal year following that in which the foregoing appropriation first becomes available, and for each year thereafter, the sum of $500,000. The additional sums appropriated under the provisions of this act shall be subject to the same conditions and limitations as the additional sums appropriated under such act of May 8, 1914, except that (1) at least 80 per centum of all appropriations under this act shall be utilized for the payment of salaries of extension agents in counties of the several States to further develop the cooperative extension system in agriculture and home economics with men, women, boys, and girls; (2) funds available to the several States and the Territory of Hawaii under the terms of this act shall be so expended that the extension agents appointed under its provisions shall be men and women in fair and just proportions; (3) the restriction on the use of these funds for the promotion of agricultural trains shall not apply.

SEC. 2. The sums appropriated under the provisions of this act shall be in addition to, and not in substitution for, sums appropriated under such act of

May 8, 1914, or sums otherwise annually appropriated for cooperative agricultural extension work.

Approved, May 22, 1928 (45 Stat. L. 711).

ACT OF 1929 EXTENDING THE BENEFITS OF THE HATCH ACT AND THE SMITH-LEVER ACT TO THE TERRITORY OF ALASKA

AN ACT To extend the benefits of the Hatch Act and the Smith-Lever Act to the Territory of Alaska

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following acts, to wit, an act entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an Act approved July 2, 1862, and of the acts supplementary thereto," approved March 2, 1887, as amended and supplemented, and known as the Hatch Act; and an act entitled "An act to provide for cooperative extension work between the agricultural colleges in the United States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," approved May 8, 1914, and known as the Smith-Lever Act, be and the same are hereby, extended to the Territory of Alaska: *Provided,* That no appropriations shall be made under this act until annually estimated as to funds and amounts by the Secretary of Agriculture; the estimates to be based upon his determination of the ability of the Territory of Alaska to make effective use of the funds.

With the approval of the Secretary of Agriculture, agricultural experiment substations, to the number of not more than two, may be maintained under the provisions of the Hatch Act.

Approved, February 23, 1929 (45 Stat. L. 1256).

ACT OF 1931 EXTENDING THE BENEFITS OF THE EXPERIMENT STATION AND EXTENSION ACTS TO PUERTO RICO

AN ACT To coordinate the agricultural-experiment-station work and to extend the benefits of certain acts of Congress to the Territory of Puerto Rico

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That beginning with the fiscal year ending June 30, 1933, the Territory of Puerto Rico shall be entitled to share in the benefits of the act entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto," approved March 2, 1887, as amended and supplemented, and of the act entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," approved May 8, 1914, and of acts supplementary thereto: *Provided,* That the experiment station so

established shall be connected with the College of Agriculture of the University of Puerto Rico and it shall be conducted jointly and in collaboration with the existing Federal experiment station in Puerto Rico in enlarging and expanding the work of the said Federal station on cooperative plans approved by the Secretary of Agriculture; and the Secretary of Agriculture shall coordinate the work of the Territorial stations with that of the Federal station and of the United States Department of Agriculture in the island: *Provided further,* That the several experiment stations now conducted by the insular government shall be transferred to and coordinated with the experiment station of the College of Agriculture of the University of Puerto Rico, together with whatever funds that are available for the support of the same, and the Secretary of Agriculture may at his discretion transfer such land, buildings, and equipment as he may deem necessary to the experiment station of the College of Agriculture of the University of Puerto Rico: *Provided further,* That the Territory of Puerto Rico shall make provision for such additional buildings and permanent equipment as may be necessary for the development of the work.

Sec. 2. To carry into effect the above provisions for extending to Puerto Rico the benefits of the act of March 2, 1887, and supplementary acts in the order and amounts designated by these acts, the following sums are hereby authorized to be appropriated in addition to the amounts appropriated to the Department of Agriculture for use in Puerto Rico; $15,000 for the fiscal year ending June 30, 1933; $20,000 for the fiscal year ending June 30, 1934; $25,000 for the fiscal year ending June 30, 1935; $30,000 for the fiscal year ending June 30, 1936; $35,000 for the fiscal year ending June 30, 1937; $40,000 for the fiscal year ending June 30, 1938; $45,000 for the fiscal year ending June 30, 1939; $50,000 for the fiscal year ending June 30, 1940; $60,000 for the fiscal year ending June 30, 1941; $70,000 for the fiscal year ending June 30, 1942; $80,000 for the fiscal year ending June 30, 1943; and $90,000 for the fiscal year ending June 30, 1944, and thereafter a sum equal to that provided for each State and Territory for agricultural experiment stations established under the act of March 2, 1887.

Sec. 3. The permanent annual appropriations provided for in section 3 of said act of May 8, 1914, and of acts supplementary thereto are hereby authorized to be increased by an amount necessary to carry out the provisions of this act, but without diminishing or increasing the amount to which any State or the Territory of Hawaii is entitled under the provisions of said act of May 8, 1914, and of acts supplementary thereto: *Provided,* That for the fiscal year 1933 the total amount available to the Territory of Puerto Rico under the terms of the act of May 8, 1914, shall be $50,000, this amount to be increased by $10,000 annually, or such part thereof as may be necessary, until the total to which Puerto Rico is entitled under the provisions of this act is reached. Participation in other Federal appropriations for cooperative extension work, including those authorized by the act of May 22, 1928, shall be at such times and in such amounts as shall be estimated by the Secretary of Agriculture and appropriated by the Congress.

Approved, March 4, 1931 (46 Stat. L. 1520).

ACT OF 1935 PROVIDING FOR AGRICULTURAL RESEARCH, FURTHER DEVELOPMENT OF COOPERATIVE AGRICULTURAL EXTENSION WORK, AND MORE COMPLETE ENDOWMENT AND SUPPORT OF LAND-GRANT COLLEGES

[Bankhead-Jones Act]

AN ACT To provide for research into basic laws and principles relating to agriculture and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land-grant colleges

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

TITLE I [2]

TITLE II

SEC. 21. In order to further develop the cooperative extension system as inaugurated under the act entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of the act of Congress approved July 2, 1862, and all acts supplementary thereto, and the United States Department of Agriculture," approved May 8, 1914 (U. S. C., title 7, secs. 341–348), there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of paying the expenses of cooperative extension work in agriculture and home economics and the necessary printing and distribution of information in connection with the same, the sum of $8,000,000 for the fiscal year beginning after the date of the enactment of this title, and for the fiscal year following the first fiscal year for which an appropriation is made in pursuance of the foregoing authorization the additional sum of $1,000,000, and for each succeeding fiscal year thereafter an additional sum of $1,000,000 until the total appropriations authorized by this section shall amount to $12,000,000 annually, the authorization to continue in that amount for each succeeding fiscal year. The sums appropriated in pursuance of this section shall be paid to the several States and the Territory of Hawaii in the same manner and subject to the same conditions and limitations as the additional sums appropriated under the act of May 8, 1914, except that (1) $980,000 shall be paid to the several States and the Territory of Hawaii in equal shares; (2) the remainder shall be paid to the several States and the Territory of Hawaii in the proportion that the farm population of each bears to the total farm population of the several States and the Territory of Hawaii, as determined by the last preceding decennial census, and (3) the several States and the Territory of Hawaii shall not be required to offset the allotments authorized in this section. The sums appropriated

[[2] This title is omitted because it refers entirely to the conduct of research.—L.D.K.]

pursuant to this section shall be in addition to, and not in substitution for, sums appropriated under such act of May 8, 1914, as amended and supplemented, or sums otherwise appropriated for agricultural extension work. Allotments to any State or the Territory of Hawaii for any fiscal year from the appropriations herein authorized shall be available for payment to such State or the Territory of Hawaii only if such State or the Territory of Hawaii complies, for such fiscal year, with the provisions with reference to offset of appropriations (other than appropriations under this section) for agricultural extension work.

Sec. 22. In order to provide for the more complete endowment and support of the colleges in the several States and the Territory of Hawaii entitled to the benefits of the act entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, as amended and supplemented (U. S. C., title 7, secs. 301–328; Supp. VII, sec. 304), there are hereby authorized to be appropriated annually, out of any money in the Treasury not otherwise appropriated, the following amounts:

(*a*) For the fiscal year beginning after the date of the enactment of this act, and for each fiscal year thereafter, $980,000; and

(*b*) For the fiscal year following the first fiscal year for which an appropriation is made in pursuance of paragraph (*a*) $500,000, and for each of the two fiscal years thereafter $500,000 more than the amount authorized to be appropriated for the preceding fiscal year, and for each fiscal year thereafter $1,500,000. The sums appropriated in pursuance of paragraph (*a*) shall be paid annually to the several States and the Territory of Hawaii in equal shares. The sums appropriated in pursuance of paragraph (*b*) shall be in addition to sums appropriated in pursuance of paragraph (*a*) and shall be allotted and paid annually to each of the several States and the Territory of Hawaii in the proportion which the total population of each such State and the Territory of Hawaii bears to the total population of all the States and the Territory of Hawaii, as determined by the last preceding decennial census. Sums appropriated in pursuance of this section shall be in addition to sums appropriated or authorized under such act of July 2, 1862, as amended and supplemented, and shall be applied only for the purposes of the colleges defined in such act, as amended and supplemented. The provisions of law applicable to the use and payment of sums under the act entitled "An Act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of an act of Congress approved July second, eighteen hundred and sixty-two," approved August 30, 1890, as amended and supplemented, shall apply to the use and payment of sums appropriated in pursuance of this section.

Approved, June 29, 1935.

ACT OF 1936 EXTENDING THE BENEFITS OF THE ADAMS ACT, THE PURNELL ACT, AND THE CAPPER-KETCHAM ACT TO THE TERRITORY OF ALASKA

AN ACT To extend the benefits of the Adams Act, the Purnell Act, and the Capper-Ketcham Act to the territory of Alaska, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following acts, to wit, an act entitled "An act to provide for an increased annual appropriation for agricultural experiment stations and regulating the expenditure thereof," approved March 16, 1906, and known as the Adams Act; an act entitled "An act to authorize the more complete endowment of agricultural experiment stations, and for other purposes," approved February 24, 1925, and known as the Purnell Act; and an act entitled "An act to provide for the further development of agricultural extension work between the agricultural colleges in the several States receiving the benefit of the act entitled 'An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts,' approved July 2, 1862, and all acts supplementary thereto, and the United States Department of Agriculture," approved May 22, 1928, and known as the Capper-Ketcham Act, be, and the same are hereby, extended to the Territory of Alaska.

SEC. 2. To carry into effect the above provisions for extending to the Territory of Alaska to the extent herein provided, the benefits of the said Adams Act and the said Purnell Act the following sums are hereby authorized to be appropriated: For the fiscal year ending June 30, 1937, $5,000; for the fiscal year ending June 30, 1938, $7,500; for the fiscal year ending June 30, 1939, $10,000; for the fiscal year ending June 30, 1940, $12,500; for the fiscal year ending June 30, 1941, $15,000; for the fiscal year ending June 30, 1942, $17,500; for the fiscal year ending June 30, 1943, $20,000; for the fiscal year ending June 30, 1944, $22,500; for the fiscal year ending June 30, 1945, $27,500; for the fiscal year ending June 30, 1946, $32,500; for the fiscal year ending June 30, 1947, $37,500; and thereafter a sum equal to one-half of that provided for each State and Territory under the said Adams Act and the said Purnell Act: *Provided,* That no appropriations shall be made under this act until annually estimated as to funds and amounts by the Secretary of Agriculture, the estimates to be based upon his determination of the ability of the Territory of Alaska to make effective use of the funds in maintaining agricultural experiment stations.

SEC. 3. To carry into effect the above provisions for extending to the Territory of Alaska, to the extent herein provided, the benefits of the said Capper-Ketcham Act the following sums are hereby authorized to be appropriated: For the fiscal year ending June 30, 1937, $2,500; for the fiscal year ending June 30, 1938, $5,000; for the fiscal year ending June 30, 1939, $7,500; for the fiscal year ending June 30, 1940, and annually thereafter, $10,000; *Provided,* That no appropriations shall be made under this act until annually

estimated as to funds and amounts by the Secretary of Agriculture, the estimates to be based upon his determination of the ability of the Territory of Alaska to make effective use of the funds: *And provided further*, That whereas the said Capper-Ketcham Act provides that "at least 80 per centum of all appropriations under this act shall be utilized for the payment of salaries of extension agents in counties of the several States to further develop the cooperative extension system in agriculture and home economics with men, women, boys, and girls," the several established judicial divisions of the Territory of Alaska, as the same shall exist from time to time, shall be considered as counties for the purpose of complying with the provisions of this act until a subdivision of the Territory of Alaska into counties is effected.

Approved, June 20, 1936 (49 Stat. L. 1553).

ACT OF 1937 EXTENDING THE BENEFITS OF THE EXTENSION SECTION (SEC. 21) OF THE BANKHEAD-JONES ACT TO PUERTO RICO

AN ACT To extend the benefits of section 21 of the Bankhead-Jones Act to Puerto Rico

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of section 21 of the act entitled "An act to provide for research into basic laws and principles relating to agriculture and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land-grant colleges," approved June 29, 1935, and known as the Bankhead-Jones Act, be, and the same are hereby, extended to Puerto Rico in such amounts as are hereinafter authorized without diminution of the amounts authorized for payment to the States and the Territory of Hawaii as provided in section 21 of that act.

SEC. 2. To carry into effect the above provisions for extending to Puerto Rico, to the extent herein provided, the benefits of the said Bankhead-Jones Act, the following sums are hereby authorized to be appropriated: For the fiscal year beginning after the date of the enactment of this act, $88,000; for the fiscal year following the first fiscal year for which an appropriation is made in pursuance of the foregoing authorization, the additional sum of $40,000; and for each succeeding fiscal year thereafter an additional sum of $40,000 until the total appropriations authorized by this section shall amount to $408,000 annually, the authorization to continue in that amount for each succeeding fiscal year.

Approved, August 28, 1937 (50 Stat. L. 881).

ACT OF 1945 TO PROVIDE FOR FURTHER DEVELOPMENT OF AGRICULTURAL EXTENSION WORK

[Bankhead-Flannagan Act]

AN ACT To provide for the further development of cooperative agricultural extension work

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That title II of the Act entitled "An Act to provide for research into basic laws and principles relating to agriculture and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land-grant colleges," approved June 29, 1935 (the Bankhead-Jones Act), is amended by adding at the end thereof the following new section:

"SEC. 23. (a) In order to further develop the cooperative extension system as inaugurated under the Act entitled 'An Act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of the Act of Congress, approved July 2, 1862, and all Acts supplementary thereto, and the United States Department of Agriculture,' approved May 8, 1914 (U. S. C., title 7, secs. 341–343, 344–348), particularly for the further development of county extension work, there are hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of paying the expenses of cooperative extension work in agriculture and home economics, including technical and educational assistance to farm people in improving their standards of living, in developing individual farm and home plans, better marketing and distribution of farm products, work with rural youth in 4-H Clubs and older out-of-school youth, guidance of farm people in improving farm and home buildings, development of effective programs in canning, food preservation, and nutrition, and for the necessary printing and distribution of information in connection with the foregoing, the following sums:

"(1) $4,500,000 for the fiscal year ending June 30, 1946, and each subsequent fiscal year;

"(2) An additional $4,000,000 for the fiscal year ending June 30, 1947, and each subsequent fiscal year; and

"(3) An additional $4,000,000 for the fiscal year ending June 30, 1948, and each subsequent fiscal year.

"(b) The sums appropriated pursuant to this section shall be paid to the several States and the Territory of Hawaii in the same manner and subject to the same conditions and limitations as the additional sums appropriated under such Act of May 8, 1914 (the Smith-Lever Act), except that—

"(1) not more than 2 per centum of the sum appropriated pursuant to this section for each fiscal year shall be available for paying expenses of the Extension Service in the United States Department of Agriculture;

"(2) $500,000 of the sum so appropriated for each fiscal year shall be

allotted among the States and the Territory of Hawaii by the Secretary of Agriculture on the basis of special needs due to population characteristics, area in relation to farm population, or other special problems, as determined by such Secretary: *Provided*, That not to exceed 10 per centum shall be allotted under this subparagraph to any one State or the Territory of Hawaii for any fiscal year: *Provided further*, That these funds shall be matched by the State or Territory receiving them, on the same basis as other funds under this Act; and

"(3) the remainder of the sum so appropriated for each fiscal year shall be paid to the several States and the Territory of Hawaii in the proportion that the farm population of each bears to the total farm population of the several States and Territory of Hawaii, as determined by the census of 1940.

"(c) The sums appropriated pursuant to this section shall be in addition to and not in substitution for sums appropriated under such Act of May 8, 1914, as amended and supplemented, or sums otherwise appropriated for agricultural extension work. Allotments to any State or the Territory of Hawaii for any fiscal year from the appropriations herein authorized shall be available for payment to such State or the Territory of Hawaii only if such State or the Territory of Hawaii complies, for such fiscal year, with the provisions with reference to offset of appropriations (other than appropriations under this section and section 21 of this title) for agricultural extension work."

SEC. 2. Section 21 of such Act of June 29, 1935, is amended by striking out "(other than appropriations under this section)" and inserting in lieu thereof "(other than appropriations under this section and section 23 of this title)."

Approved, June 6, 1945 (59 Stat. L. 231).

ACT OF 1946 PROVIDING FOR FURTHER RESEARCH IN MARKETING, DISTRIBUTION, PROCESSING, UTILIZATION AND NUTRITION AND TO FURTHER IMPROVE AND FACILITATE THE MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCTS

[Agricultural Marketing Act]

AN ACT To provide for further research into basic laws and principles relating to agriculture and to improve and facilitate the marketing and distribution of agricultural products

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I[3]

[[3] This Title is omitted because it refers entirely to the conduct of research.—L.D.K.]

TITLE II

This title may be cited as the "Agricultural Marketing Act of 1946."

SEC. 202. The Congress hereby declares that a sound, efficient, and privately operated system for distributing and marketing agricultural products is essential to a prosperous agriculture and is indispensable to the maintenance of full employment and to the welfare, prosperity, and health of the Nation. It is further declared to be the policy of Congress to promote through research, study, experimentation, and through cooperation among Federal and State agencies, farm organizations, and private industry a scientific approach to the problems of marketing, transportation, and distribution of agricultural products similar to the scientific methods which have been utilized so successfully during the past eighty-four years in connection with the production of agricultural products so that such products capable of being produced in abundance may be marketed in an orderly manner and efficiently distributed. In order to attain these objectives, it is the intent of Congress to provide for (1) continuous research to improve the marketing, handling, storage, processing, transportation, and distribution of agricultural products; (2) cooperation among Federal and State agencies, producers, industry organizations, and others in the development and effectuation of research and marketing programs to improve the distribution processes; (3) an integrated administration of all laws enacted by Congress to aid the distribution of agricultural products through research, market aids and services, and regulatory activities, to the end that marketing methods and facilities may be improved, that distribution costs may be reduced and the price spread between the producer and consumer may be narrowed, that dietary and nutritional standards may be improved, that new and wider markets for American agricultural products may be developed, both in the United States and in other countries, with a view to making it possible for the full production of American farms to be disposed of usefully, economically, profitably, and in an orderly manner. In effectuating the purposes of this title, maximum use shall be made of existing research facilities owned or controlled by the Federal Government or by State agricultural experiment stations and of the facilities of the Federal and State extension services. To the maximum extent practicable marketing research work done hereunder in cooperation with the States shall be done in cooperation with the State agricultural experiment stations; marketing educational and demonstrational work done hereunder in cooperation with the States shall be done in cooperation with the State agricultural extension service; market information, inspection, regulatory work and other marketing service done hereunder in cooperation with the State agencies shall be done in cooperation with the State departments of agriculture, and State bureaus and departments of markets.

SEC. 203. The Secretary of Agriculture is directed and authorized:

(a) To conduct, assist, and foster research, investigation, and experimentation to determine the best methods of processing, preparation for market, packaging, handling, transporting, storing, distributing, and marketing agri-

cultural products: *Provided*, That the results of such research shall be made available to the public for the purpose of expanding the use of American agricultural products in such manner as the Secretary of Agriculture may determine.

(b) To determine costs of marketing agricultural products in their various forms and through the various channels and to foster and assist in the development and establishment of more efficient marketing methods (including analyses of methods and proposed methods), practices, and facilities, for the purpose of bringing about more efficient and orderly marketing, and reducing the price spread between the producer and the consumer.

(c) To develop and improve standards of quality, condition, quantity, grade, and packaging, and recommend and demonstrate such standards in order to encourage uniformity and consistency in commercial practices.

(d) To conduct, assist, foster, and direct studies and informational programs designed to eliminate artificial barriers to the free movement of agricultural products.

(e) To foster and assist in the development of new or expanded markets (domestic and foreign) and new and expanded uses and in the moving of larger quantities of agricultural products through the private marketing system to consumers in the United States and abroad.

(f) To conduct and cooperate in consumer education for the more effective utilization and greater consumption of agricultural products: *Provided*, That no money appropriated under the authority of this Act shall be used to pay for newspaper or periodical advertising space or radio time in carrying out the purposes of this section and section 203 (e).

(g) To collect and disseminate marketing information, including adequate outlook information on a market-area basis, for the purpose of anticipating and meeting consumer requirements, aiding in the maintenance of farm income, and bringing about a balance between production and utilization of agricultural products.

(h) To inspect, certify, and identify the class, quality, quantity, and condition of agricultural products when shipped or received in interstate commerce, under such rules and regulations as the Secretary of Agriculture may prescribe, including assessment and collection of such fees as will be reasonable and as nearly as may be to cover the cost of the service rendered, to the end that agricultural products may be marketed to the best advantage, that trading may be facilitated, and that consumers may be able to obtain the quality product which they desire, except that no person shall be required to use the service authorized by this subsection. Any official certificate issued under the authority of this subsection shall be received by all officers and all courts of the United States as prima facie evidence of the truth of the statements therein contained.

(i) To determine the needs and develop or assist in the development of plans for efficient facilities and methods of operating such facilities for the proper assembly, processing, transportation, storage, distribution, and handling of agricultural products.

(j) To assist in improving transportation services and facilities and in obtaining equitable and reasonable transportation rates and services and adequate transportation facilities for agricultural products and farm supplies by making complaint or petition to the Interstate Commerce Commission, the Maritime Commission, the Civil Aeronautics Board, or other Federal or State transportation regulatory body with respect to rates, charges, tariffs, practices, and services, or by working directly with individual carriers or groups of carriers.

(k) To collect, tabulate, and disseminate statistics on marketing agricultural products, including, but not restricted to statistics on market supplies, storage stocks, quantity, quality, and condition of such products in various positions in the marketing channel, utilization of such products, and shipments and unloads thereof.

(l) To develop and promulgate, for the use and at the request of any Federal agency or State, procurement standards and specifications for agricultural products, and submit such standards and specifications to such agency or State for use or adoption for procurement purposes.

(m) To conduct, assist, encourage, and promote research, investigation, and experimentation to determine the most efficient and practical means, methods, and processes for the handling, storing, preserving, protecting, processing, and distributing of agricultural commodities to the end that such commodities may be marketed in an orderly manner and to the best interest of the producers thereof.

(n) To conduct such other research and services and to perform such other activities as will facilitate the marketing, distribution, processing, and utilization of agricultural products through commercial channels.

Sec. 204. (a) In order to conduct research and service work in connection with the preparation for market, processing, packaging, handling, storing, transporting, distributing, and marketing of agricultural products as authorized by this title, there is hereby authorized to be appropriated the following sums:

(1) $2,500,000 for the fiscal year ending June 30, 1947, and each subsequent fiscal year.

(2) An additional $2,500,000 for the fiscal year ending June 30, 1948, and each subsequent fiscal year.

(3) An additional $5,000,000 for the fiscal year ending June 30, 1949, and each subsequent fiscal year.

(4) An additional $5,000,000 for the fiscal year ending June 30, 1950, and each subsequent fiscal year.

(5) An additional $5,000,000 for the fiscal year ending June 30, 1951, and each subsequent fiscal year.

(6) In addition to the foregoing, such additional funds beginning with the fiscal year ending June 30, 1952, and thereafter, as the Congress may deem necessary.

Such sums appropriated in pursuance of this title shall be in addition to, and

not in substitution for, sums appropriated or otherwise made available to the Department of Agriculture.

(b) The Secretary of Agriculture is authorized to make available from such funds such sums as he may deem appropriate for allotment to State departments of agriculture, State bureaus and departments of markets, State agricultural experiment stations, and other appropriate State agencies for cooperative projects in marketing service and in marketing research to effectuate the purposes of title II of this Act: *Provided*, That no such allotment and no payment under any such allotment shall be made for any fiscal year to any State agency in excess of the amount which such State agency makes available out of its own funds for such research. The funds which State agencies are required to make available in order to qualify for such an allotment shall be in addition to any funds now available to such agencies for marketing services and for marketing research. The allotments authorized under this section shall be made to the agency or agencies best equipped and qualified to conduct the specific project to be undertaken. Such allotments shall be covered by cooperative agreements between the Secretary of Agriculture and the cooperating agency and shall include appropriate provisions for preventing duplication or overlapping of work within the State or States cooperating. Should duplication or overlapping occur subsequent to approval of a cooperative project or allotment of funds, the Secretary of Agriculture is authorized and directed to withhold unexpended balances on such projects notwithstanding the prior approval thereof.

SEC. 205. (a) In carrying out the provisions of title II of this Act, the Secretary of Agriculture may cooperate with other branches of the Government, State agencies, private research organizations, purchasing and consuming organizations, boards of trade, chambers of commerce, other associations of business or trade organizations, transportation and storage agencies and organizations, or other persons or corporations engaged in the production, transportation, storing, processing, marketing, and distribution of agricultural products whether operating in one or more jurisdictions. The Secretary of Agriculture shall have authority to enter into contracts and agreements under the terms of regulations promulgated by him with States and agencies of States, private firms, institutions, and individuals for the purpose of conducting research and service work, making and compiling reports and surveys, and carrying out other functions relating thereto when in his judgment the services or functions to be performed will be carried out more effectively, more rapidly, or at less cost than if performed by the Department of Agriculture. Contracts hereunder may be made for work to be performed within a period not more than four years from the date of any such contract, and advance, progress, or other payments may be made. The provisions of section 3648 (31 U. S. C., sec. 529) and section 3709 (41 U. S. C., sec. 5) of the Revised Statutes shall not be applicable to contracts or agreements made under the authority of this section. Any unexpended balances of appropriations obligated by contracts as authorized by this section may, notwithstanding the provi-

sions of section 5 of the Act of June 20, 1874, as amended (31 U. S. C., sec. 713), remain upon the books of the Treasury for not more than five fiscal years before being carried to the surplus fund and covered into the Treasury. Any contract made pursuant to this section shall contain requirements making the result of such research and investigations available to the public by such means as the Secretary of Agriculture shall determine.

(b) The Secretary of Agriculture shall promulgate such orders, rules, and regulations as he deems necessary to carry out the provisions of this title. In his annual report to Congress, he shall include a complete statement of research work being performed under contracts or cooperative agreements under this title, showing the names of the agencies cooperating and the amounts expended thereon, segregated by Federal and non-Federal funds.

Sec. 206. In order to facilitate administration and to increase the effectiveness of the marketing research, service, and regulatory work of the Department of Agriculture to the fullest extent practicable, the Secretary of Agriculture is authorized, notwithstanding any other provisions of law, to transfer, group, coordinate, and consolidate the functions, powers, duties, and authorities of each and every agency, division, bureau, service, section, or other administrative unit in the Department of Agriculture primarily concerned with research, service, or regulatory activities in connection with the marketing, transportation, storage, processing, distribution of, or service or regulatory activities in connection with, the utilization of, agricultural products, into a single administrative agency. In making such changes as may be necessary to carry out effectively the purposes of this title, the records, property, personnel, and funds of such agencies, divisions, bureaus, services, sections, or other administrative units in the Department of Agriculture affected thereby are authorized to be transferred to and used by such administrative agency to which the transfer may be made, but such unexpended balances of appropriations so transferred shall be used only for the purposes for which such appropriations were made.

Sec. 207. When used in this title, the term "agricultural products" includes agricultural, horticultural, viticultural, and dairy products, livestock and poultry, bees, forest products, fish and shellfish, and any products thereof, including processed and manufactured products, and any and all products raised or produced on farms and any processed or manufactured product thereof.

Sec. 208. The Secretary of Agriculture shall have the power to appoint, remove, and fix, in accordance with existing law, the compensation of such officers and employees, and to make such expenditures as he deems necessary, including expenditures for rent outside the District of Columbia, travel, supplies, books, equipment, and such other expenditures as may be necessary to the administration of this title: *Provided*, That the Secretary of Agriculture may appoint and fix the compensation of any technically qualified person, firm, or organization by contract or otherwise on a temporary basis and for a term not to exceed six months in any fiscal year to perform research, in-

spection, classification, technical, or other special services, without regard to the civil-service laws or the Classification Act of 1923, as amended.

TITLE III

SEC. 301. In order to aid in implementing the research and service work authorized under titles I and II of this Act, and to assist in obtaining the fullest cooperation among Federal and State agencies, producers, farm organizations, and private industry, in the development of and in effectuating such research and service programs, and in order to secure the greatest benefit from the expenditure of funds, the Secretary of Agriculture shall establish a national advisory committee. The functions of such advisory committee shall be to consult with the Secretary of Agriculture and other appropriate officials of the Department of Agriculture, to make recommendations relative to research and service work authorized by this Act, and to assist in obtaining the cooperation of producers, farm organizations, industry groups, and Federal and State agencies in the furtherance of such research and service programs. The chairman of the committee shall be the Secretary of Agriculture or such other official of the Department of Agriculture as he shall designate. The committee shall consist of eleven members, six of whom shall be representatives of producers or their organizations. The committee shall meet at least once each quarter and at such other times as are deemed necessary. Members of the committee may not appoint alternates to serve in their stead. Committee members other than the chairman shall not be deemed to be employees of the United States and are not entitled to compensation, but the Secretary of Agriculture is authorized to allow their traveling and subsistence expenses necessary in connection with their attendance at meetings called by him for the purposes of this section.

SEC. 302. In the furtherance of the research and service work authorized by this Act, the Secretary of Agriculture may, in addition to the national advisory committee, establish appropriate committees, including representatives of producers, industry, government, and science, to assist in effectuating specific research and service programs.

Approved August 14, 1946.

MEMORANDUM OF UNDERSTANDING BETWEEN THE NEW YORK STATE COLLEGE OF AGRICULTURE AT CORNELL UNIVERSITY AND THE UNITED STATES DEPARTMENT OF AGRICULTURE REGARDING EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS IN THE STATE OF NEW YORK [4]

WHEREAS, The State College of Agriculture at Cornell University has, or may hereafter have, under its control Federal and State funds for extension

[[4] This memorandum is based on a form used throughout the country since 1914 with variations in details.—L.D.K.]

work in agriculture and home economics, which are or may be supplemented by funds contributed for similar purposes by counties and other institutions, organizations, and individuals within said State, and the United States Department of Agriculture has, or may hereafter have, funds appropriated directly to it by Congress which can be expended for demonstration and other forms of extension work in the State of New York;

THEREFORE, with a view of securing economy and efficiency in the conduct of extension work in the State of New York, the President of Cornell University, acting subject to the approval of the Agricultural College Council and the Board of Trustees of said University, and the Secretary of Agriculture of the United States hereby make the following memorandum of understanding with reference to cooperative relations between said University and the United States Department of Agriculture in the organization and conduct of extension work in agriculture and home economics by the State College of Agriculture in the State of New York.

I. *The State College of Agriculture at Cornell University agrees:*

(1) To organize and maintain a *Department of Extension Teaching,* with a professor in charge satisfactory to the Department of Agriculture.

(2) To administer through the Department of Extension Teaching thus organized and under the direction of the Dean and Director of the State College of Agriculture any and all funds it has or may hereafter specifically receive for such work from appropriations made by Congress or the State Legislature, by allotment from its Board of Trustees, or from any other source.

(3) To cooperate with the United States Department of Agriculture in all extension work in agriculture and home economics which said Department is or shall be authorized by Congress to conduct in the State of New York.

II. *The United States Department of Agriculture agrees:*

(1) To establish and maintain in the Department of Agriculture a States Relations Committee, pending the authorization by Congress of a States Relations Service, which shall represent the Department in the general supervision of all cooperative extension work in agriculture and home economics in which the Department shall participate in the State of New York, and shall have charge of the Department's business connected with the administration of Federal funds granted to the States under the Smith-Lever Act.

(2) To carry on in cooperation with the New York State College of Agriculture at Cornell University all demonstration and other forms of extension work in agriculture and home economics which the Department is authorized by Congress to conduct in the State of New York.

III. *Cornell University and the United States Department of Agriculture mutually agree:*

(1) That the aforesaid cooperative extension work in agriculture and home economics in the State of New York involving the use of direct Congressional appropriations to the Department of Agriculture shall be planned under the joint supervision of the Dean and Director of the New York State College of Agriculture at Cornell University and the Officer in Charge of

Extension Work of the United States Department of Agriculture in the North and West, subject to the approval of the Secretary of Agriculture or his duly authorized representatives.

(2) That all appointees for cooperative extension work in agriculture and home economics in the State of New York, under this memorandum and subsequent project agreements involving the use of direct Congressional appropriations to the Department of Agriculture, shall be joint representatives of the New York State College of Agriculture and the United States Department of Agriculture, unless otherwise expressly provided in the project agreements.

(3) That the cooperation as aforesaid shall be plainly set forth in all publications or other printed matter issued and used in connection with said cooperative extension work by either the New York State College of Agriculture or the United States Department of Agriculture.

(4) That the plans for the use of the Smith-Lever fund shall be made by the Dean and Director of the State College of Agriculture but shall be subject to the approval of the Secretary of Agriculture in accordance with the terms of the Smith-Lever Act, and when so approved shall be executed by the Dean and Director of said College.

(5) That the headquarters of the State organization contemplated in this memorandum shall be at the New York State College of Agriculture, Cornell University, Ithaca, New York.

. . . .

This Memorandum shall take effect when approved by the President of Cornell University and the Secretary of Agriculture of the United States, and shall remain in force until it is expressly abrogated in writing by either one of the signers or their successors in office.

Date August 29, 1914

(Signed) J. G. Schurman
President of Cornell University

Date September 2, 1914

(Signed) Carl Vrooman
Acting Secretary of Agriculture

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